

REAUTHORIZATION OF THE CARL D. PERKINS
VOCATIONAL AND TECHNICAL EDUCATION
ACT: EDUCATION FOR THE 21st CENTURY
WORKFORCE

HEARING

BEFORE THE

COMMITTEE ON HEALTH, EDUCATION,
LABOR, AND PENSIONS
UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

ON

EXAMINING THE REAUTHORIZATION OF THE CARL D. PERKINS VOCATIONAL AND TECHNICAL EDUCATION ACT, FOCUSING ON COMMUNITY COLLEGES, THE CHALLENGES OF SERVING RURAL POPULATIONS, AND "PROJECT LEAD THE WAY"

JUNE 24, 2004

Printed for the use of the Committee on Health, Education, Labor, and Pensions



U.S. GOVERNMENT PRINTING OFFICE

94-708 PDF

WASHINGTON : 2005

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
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REAUTHORIZATION OF THE CARL D. PERKINS VOCATIONAL AND TECHNICAL EDUCATION ACT: EDUCATION FOR THE 21ST CENTURY WORKFORCE

THURSDAY, JUNE 24, 2004

U.S. SENATE,
COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS,
Washington, DC.

The committee met, pursuant to notice, at 10:06 a.m., in room SD-430, Dirksen Senate Office Building, Hon. Michael B. Enzi, presiding.

Present: Senators Enzi, Bingaman, Reed, and Clinton.

OPENING STATEMENT OF SENATOR ENZI

Senator ENZI. I will go ahead and call the hearing to order.

I want to thank Senator Gregg for giving me the opportunity to chair this hearing, "Education for the 21st Century Workforce." Today we will be focusing on the reauthorization of the Carl D. Perkins Vocational and Technical Education Act.

The Perkins Act is the central part of a combination of Federal programs that serves to provide support for lifelong learning to the workforce of today and tomorrow. The Perkins Act, together with the Workforce Investment Act, the Higher Education Act, and other Federal education and training programs, offer the resources that are needed to help adequately prepare students of all ages for jobs in high-wage and high-skilled occupations. In this technology-driven, global economy, everyone is a student who must adapt to changing workforce needs by continuing to pursue lifelong learning.

Unfortunately, we often talk about education separately from the workforce training and economic development, or we talk about programs instead of principles. Education and job training are not one-time events. We need to think about these issues as part of one continuous and comprehensive effort. The long-term competitiveness of the American economy depends not just on effective education, economic, and workforce development, but on effectively linking those issues.

Lifelong learning begins with a quality education that includes relevant academic and skills training. State and local education agencies, businesses, postsecondary institutions, and interested community groups all need to be a part of the discussion about how we can best help promote and sustain the long-term competitiveness of this Nation.

This country has created over 1 million new jobs since January. That is terrific news. Yet the complaint from employers heard consistently in this country is that there are too few skilled workers to meet their needs. That is why Federal initiatives like the Workforce Investment Act reauthorization are so important. Along with the Workforce Investment Act and the Higher Education Act, the Perkins Act can help close the skills gap that threatens America's long-term competitiveness. It is essential that we take advantage of the opportunity we have during this reauthorization process to improve the link between education and relevant academic and skills preparation. It is also essential that we appoint conferees to finish the work on this legislation reauthorizing the Workforce Investment Act, legislation that has passed the committee unanimously, passed the Senate unanimously, yet it is being held up by lack of a conference committee. The House has approved a conference committee. The Senate is blocking the conference committee. It would amount to training for 900,000 jobs in this country.

Congress needs to start talking about education and training from a continuous perspective, from pre-kindergarten to college and beyond. This type of "P through 16-plus" approach is necessary if we are going to change the current view that education ends with a diploma or a certificate. Today's jobs require constant training, retraining, and upgrading of skills. As one of the witnesses from a March higher education hearing noted, it is possible for students to do well in school and still flunk life.

As we discuss reauthorizing the Perkins Act, we need to consider how we can place students on this pathway to prosperity by giving them the skills they need to succeed, even if they do not go on to college. This depends on both strong academic and relevant job skill training. It also depends on facilitating a sequence of vocational or technical education courses that students can complete even before they get to college, and that they can continue at the postsecondary level, whenever they decide to go on.

Another important issue that I have worked on with my colleagues in the committee in the Workforce Investment Act is the idea that we should be helping women of all ages pursue careers in high-wage, high-growth professions. The Perkins Act has a lengthy history of supporting State efforts in this area. I expect to continue that focus through this reauthorization. Today's discussion should help identify a number of options through which we can pursue that important goal.

I would also like to see this committee focus on involving businesses, especially including small businesses, in vocational and technical education—not just at the postsecondary level, but increasingly at the secondary level as well. This will help students receive instruction from business leaders, and it will also help schools design their programs to meet local workforce needs.

Finally, we must ensure that rural communities are able to take advantage of Perkins resources, whether it be through distance learning programs or involving consortia of local secondary and postsecondary providers to work together to meet the needs of rural students.

In Rock Springs, WY, a career and technical education instructor by the name of Ted Schroeder is doing a lot of what I have just

described. He has met with the local Chamber of Commerce to identify workforce needs, and he has matched his programs with industry standards and local workforce needs. When the local business community suggested they needed students with computerized accounting skills, he took on the task of designing a program to help his students acquire the skills the businesses had requested. His efforts are a good example of what Perkins funds are intended to accomplish. It is my hope we can encourage more successes with the Perkins program, similar to what Ted has done in the community of Rock Springs.

With that said, I will shift the focus to our distinguished panel. The witnesses on today's panel represent some of the most innovative programs and brightest minds in the field of vocational and technical education. They will help describe how we can prepare vocational and technical education for the future. They will also talk about how better accountability will help improve outcomes, how we can encourage greater innovation in the field of career and technical education, how we can do a better job of getting employers to participate in secondary and postsecondary education, and how we can help reach the nontraditional workers in the economy to narrow the differences in wages, commonly called the "wage gap." They will also describe how we can emphasize training for high-growth and high-skilled occupations so students can start on their own paths to prosperity.

I look forward to hearing from our witnesses today. I also look forward to crafting bipartisan legislation that will make the Perkins Act a more effective part of lifelong learning for the work of today and tomorrow.

[The prepared statement of Senator Enzi follows:]

PREPARED STATEMENT OF SENATOR ENZI

I want to thank Senator Gregg for giving me the opportunity to chair this hearing, "Education for the 21st Century Workforce." Today we will be focusing on the reauthorization of the Carl D. Perkins Vocational and Technical Education Act.

The Perkins Act is a central part of a combination of Federal programs that serves to provide support for lifelong learning to the workforce of today and tomorrow. The Perkins Act, together with the Workforce Investment Act, the Higher Education Act, and other Federal education programs, offer the resources that are needed to help adequately prepare students of all ages for jobs in high-wage and high-skilled occupations. In this technology driven, global economy, everyone is a student who must adapt to changing workforce needs by continuing to pursue their education. In turn, Congress must ensure that education and training are connected to the needs of the workforce, now and into the future as well.

Unfortunately, we often talk about education separately from workforce training and economic development, or we talk about programs instead of principles. Education and job training are not one-time events. We need to think about these issues as part of one continuous and comprehensive effort. The long-term competitiveness of the American economy depends not just on effective education, economic and workforce development, but on effectively linking those issues. Congress can help support that by creating a

pathway of lifelong learning that will help students and workers acquire and maintain the skills that will continue to propel this nation's economic growth and prosperity.

Lifelong learning begins with a quality education that includes relevant academic and skills training. State and local education agencies, businesses, postsecondary institutions and interested community groups all need to be a part of the discussion about how we can best help promote and sustain the long term competitiveness of this Nation.

To keep American workers and businesses competitive, we must prepare a skilled workforce to fill the jobs that are being created in a 21st century economy. This country has created over 1 million new jobs since January. That is terrific news! Yet the complaint from employers heard consistently in this country is that there are too few skilled workers to meet their needs. That is why Federal initiatives like the Workforce Investment Act reauthorization are so important. Along with the Workforce Investment Act and the Higher Education Act, the Perkins Act can help close the skills gap that threatens America's long-term competitiveness. It is essential that we take advantage of the opportunity we have during this reauthorization process to improve the link between education and relevant academic and skills preparation. It is also essential that we appoint conferees to finish the work on this legislation reauthorizing the Workforce Investment Act, legislation that has passed both this committee and the Senate unanimously.

The idea of lifelong learning is critical to our sustained economic growth. Unfortunately, we often think of education in a short-term or compartmentalized way. Elementary education, secondary education, and higher education and training are viewed almost as completely separate policy areas, particularly higher education. The Perkins program is unique in that it targets funds to both secondary and postsecondary schools. That unique aspect also provides a good platform from which we can better coordinate workforce preparation policy and training with an emphasis on lifelong learning.

Congress needs to start talking about education and training from a continuous perspective, from pre-kindergarten to college and beyond. This type of "P through 16 plus" approach is necessary if we are going to change the current view that education ends with a diploma or certificate. Today's jobs require constant training, retraining and upgrading of skills. As one of the witnesses from a March Higher Education hearing noted, it is possible for students to do well in school, and still flunk life. Many students leaving high school or college and entering the workforce are finding out they're unprepared for life because they lack the skills they need to succeed in the workforce. We have a very strong interest in making sure this is corrected. Placing our students on a pathway to prosperity is consistent with the intent of the Perkins program, and that should be the goal of all Federal education and training programs.

As we discuss reauthorizing the Perkins Act, we need to consider how we can place students on this pathway to prosperity by giving them the skills they need to succeed, even if they don't go on to college. This depends on both strong academic and relevant job

skill training. It also depends on facilitating a sequence of vocational or technical education courses that students can complete even before they get to college, and that they can continue at the postsecondary level, whenever they decide to go on.

Another important issue that I've worked on with my colleagues on this committee in the Workforce Investment Act is the idea that we should be helping women of all ages pursue careers in high-wage, high-growth professions. The Perkins Act has a lengthy history of supporting State efforts in this area. I expect to continue that focus through this reauthorization. Today's discussion should help identify a number of options through which we can pursue that important goal.

I'd also like to see this committee focus on involving businesses, including small businesses, in vocational and technical education not just at the postsecondary level, but increasingly at the secondary level as well. This will help students receive instruction from business leaders, and it will also help schools design their programs to meet local workforce needs.

Finally, we must also ensure that rural communities are able to take advantage of Perkins resources, whether it be through distance learning programs or involving consortia of local secondary and postsecondary providers to work together to meet the needs of rural students.

In Rock Springs, Wyoming, a career and technical education instructor by the name of Ted Schroeder is doing a lot of what I've just described. He's met with the local Chamber of Commerce to identify workforce needs and matched his programs with industry standards and local workforce needs. When the local business community suggested they needed students with computerized accounting skills, he took on the task of designing a program to help his students acquire the skills the businesses had requested. His efforts are a good example of what Perkins funds are intended to accomplish. It is my hope that we can encourage more successes with the Perkins program, similar to what Ted has done in the community of Rock Springs.

With that said, I'll shift the focus to our distinguished panel. The witnesses on today's panel represent some of the most innovative programs and brightest minds in the field of vocational and technical education. They will help describe how we can go about preparing vocational and technical education for the future. They will also talk about how better accountability will help improve outcomes, how we can encourage greater innovation in the field of career and technical education, how we can do a better job of getting employers to participate in secondary and postsecondary education, and how we can help reach the nontraditional workers in the economy to narrow the difference in wages, commonly called the "wage gap."

They will also describe how we can emphasize training for high-growth and high-skilled occupations so students can start on their own paths to prosperity.

I look forward to hearing from our witnesses today. I also look forward to crafting bipartisan legislation that will make the Perkins Act a more effective part of lifelong learning for the workforce of today and tomorrow.

Senator ENZI. Senator Bingaman, did you have an opening statement?

OPENING STATEMENT OF SENATOR BINGAMAN

Senator BINGAMAN. Mr. Chairman, I have a short one that I will put in the record. I would just make a couple or three points, if I could, before we go to the witnesses.

Thank you first for having this hearing. It is a very important issue. Unfortunately, around the Congress and around Washington generally, often times the important gets pushed aside as we deal with the immediate. And this is an important issue that really does deserve our attention, and so I very much appreciate having this hearing.

The Perkins Act is extremely important to many of the schools in my State, and we have various examples in my State of where high schools in particular—and also community colleges—have used these funds very effectively to improve the skill level of people who come to those institutions and to prepare them better for jobs.

One aspect of it that I am particularly interested in is that I am persuaded that much of the dropout problem that we have in our schools—and it is a very severe problem—much of that problem can be effectively dealt with by more attention to these kinds of programs because this offers an alternative and a more relevant alternative for a lot of the young people who are thinking about possibly leaving school before they graduate. And as I say, we have way too many students who are doing that.

The one other point I would make, Mr. Chairman, is in my view we give way too little to this effort in terms of Federal resources. I notice here the Perkins Act appropriations—not the authorization, but the appropriations—have increased during the period from 1998 to the year 2004; the increase was 15.8 percent. I guess that keeps up with inflation. I do not really think it does. But seeing what has happened with the growth in other parts of the Federal Government's budget, this area deserves more priority than we have given it.

Last night, we voted \$458 billion, or something like that, for defense and there was not a single dissenting vote. Clearly, we all agreed that we need to give priority to our defense needs. Here we are talking about \$1.3 billion. And we really ought to be doing more. We ought to be finding ways to give this a higher priority, as we put together our budgeting for the year. And I hope that that will be another thing that comes out of our reauthorization.

But I, like you, am very optimistic that we can get a bipartisan bill and go ahead and actually reauthorize this legislation in a way that has broad support across the Congress.

Thank you for having the hearing.

[The prepared statement of Senator Bingaman follows:]

PREPARED STATEMENT OF SENATOR BINGAMAN

I am pleased to participate in this hearing on reauthorization of the Carl D. Perkins Vocational and Applied Technology Education Act. More than ever, we need rigorous, relevant career and technical programs to help students prepare for postsecondary edu-

cation and to address the shortage of highly-skilled workers necessary to meet the demands of the contemporary workforce. A skilled and flexible workforce is essential to building a strong and dynamic economy and to maintaining our country's ability to compete in a global economy.

Technical employment is the fastest-growing segment of the labor market. Yet we face significant challenges in meeting the needs of the contemporary workforce. According to a 2002 survey by Center for Workforce Preparation of the U.S. Chamber of Commerce, nearly 75 percent of employers report severe difficulty when trying to hire qualified workers; 40 percent say that applicants have inadequate skills; and 30 percent say applicants have the wrong skills for available jobs. Similarly, in a 2001 survey, the National Association of Manufacturers found that more than 80 percent of manufacturers report a shortage of qualified job candidates.

Every day, American companies are sending American jobs overseas. Even the information technology sector, one of the fastest growing segments of our economy, will send approximately 500,000 jobs overseas in the coming years. Research shows that as many as 3.3 million jobs may be sent overseas in the next 15 years, causing American workers to lose \$136 billion in wages.

Strong career and technical programs are vital to addressing this skills gap. By enhancing the competencies of students, these programs offer effective and proven links to positive educational and employment outcomes for students. Positive outcomes include increased school attendance, reduced high school dropout rates, higher grades, increased entry into postsecondary education, and greater access to high-demand careers.

In particular, I would like to emphasize the value of career and technical education in addressing the dropout crisis, which has long been a concern of mine. Nationally, only about 68 percent of all students who enter 9th grade will graduate in 12th grade. Even more troubling, only approximately half of Black, Hispanic, and Native American students earn regular diplomas alongside their classmates. Students, particularly at-risk and low-income students, often do not receive information and guidance about postsecondary education and careers until too late, and they frequently lack long-term career plans. Career and technical education can help students connect their learning with the real world, increase their engagement in school, and provide seamless transitions to postsecondary education and high-skill, high-wage careers.

In my home State of New Mexico, we have over 3,000 secondary and postsecondary teachers involved in all aspects of career and technical education. These programs have a distinguished record of preparing young people and adults for further education and careers. For instance, Rio Rancho High School was featured in *Time Magazine* as one of the 10 most innovative career and technical schools in the nation. Established through a unique community/business partnership with INTEL Corporation, Rio Rancho offers the New Mexico Scholars Program, which gives students the foundation they need to succeed in a technical school, a community college, a university, the military, or business and industry.

Reflecting the best practices, we need to strengthen career and technical education programs by:

- Increasing the academic rigor of these programs;
- Integrating academic, career, and technical curricula and instruction; and
- Enhancing student outcomes related to secondary education, postsecondary education, and employment.

At the same time, we need to work with school personnel to:

- Assure that teachers have the knowledge and skills to teach effectively in career and technical programs;
- Provide ongoing professional development that can enhance their understanding of current workforce opportunities, methods, and expectations; and
- Expand career guidance and academic counseling services so that all students have a career plan that specifies their educational and career objectives.

Finally, career and technical education programs need to respond to the requirements of the modern workforce by:

- Forging alliances among secondary schools, postsecondary institutions, and business and industry to ensure that students are prepared for the current and future workforce; and
- Developing pathways to postsecondary education and careers.

Perkins reauthorization offers an opportunity to guarantee that every high school student is prepared for both postsecondary education and a high-skill, high-wage career. The current Perkins act sets out a new vision of career and technical education for the 21st century. We now have an opportunity to build on past accomplishments and to strengthen and expand career and technical education.

Senator ENZI. Thank you.

We will now proceed with the testimony. I appreciate the witnesses that have come in to do this today. We will be asking that each of you keep your comments to about 5 minutes, if you can summarize. Your entire comments and any additional comments that you want will be a part of the record. We will have some questions following the testimony of everybody, and then there will also be questions that will be sent to you that we hope you will also answer and get back to us for purposes of building the record. This is the testimony that the drafting of the legislation and then the debate on the floor will be based on, so it is extremely critical. And I do appreciate your taking the time to do this.

The first person to testify will be a neighbor to Wyoming, Dr. Mike Rush from Boise, ID. He is the Administrator of the Division of Professional-Technical Education for the State of Idaho. With an annual budget of over \$50 million, the division is the State agency responsible for coordinating and funding secondary college-level and adult professional-technical education. Dr. Rush has taught agricultural education and held faculty positions in teacher education at Penn State University, Virginia Tech, and the University of Idaho. He is currently president of the National Association of State Directors of Career Technical Education Consortium and recently authored a publication defining the key principles of career technical education. Dr. Rush received his master's degree from the University of Idaho and his doctorate from Virginia Tech with a minor in a master's of business administration program.

Dr. Rush.

**STATEMENT OF MICHAEL RUSH, PH.D., ADMINISTRATOR,
IDAHO DIVISION OF PROFESSIONAL-TECHNICAL EDU-
CATION, BOISE, ID**

Mr. RUSH. Senator Enzi, Senator Bingaman, and Members of the Committee, I was afraid I had been invited to this event by mistake, and when you said the “brightest minds,” that confirmed it. [Laughter.]

Nonetheless, thanks for giving me this opportunity to share Idaho’s perspective on vocational education or, as we call it in Idaho, “professional-technical education.” I will also be sharing the views of the National Association of State Directors of Career Technical Education and would appreciate their position being included in the record.

If you will direct your attention, I do have some slides over here on the TV. I put this particular slide in there just so you know that I do know how to use some type of technology. I also want you folks to know that what you do here does make a difference in the lives of students and adults.

One such person who exemplifies modern career technical education is Chelsie Lee Marler. Chelsie started taking PT classes at her comprehensive high school in welding and auto power technology. She then enrolled in the technical center in automotive collision repair. During that time she took advanced placement courses, and she was president of her Skills Youth Organization chapter. She then articulated into the College of Southern Idaho in collision repair and intends to go on to school to become an auto collision forensics investigator.

At every stage in her educational career, Perkins dollars have created opportunities that would not have otherwise existed, especially when coordinated with State and local funds. I offer these recommendations to make it even better.

First, we need to maintain the focus on technical skills. Some have suggested that Perkins dollars be used for high school reform. In the first place, there simply is not enough money in the pot, and in the second place, technical education is a critical component of our secondary and college delivery system. This is reinforced by the strong public support of career technical education. In Idaho, 86 percent of the general public think high school students should have more opportunities to take classes for a specific career, and 82 percent think Idahoans need more 1- and 2-year technical college programs.

Another national study looked at the economic payoff for career technical education. It found that when compared to academic work-bound students, CTE students were more likely to be employed, paid a higher wage; they earned greater total earnings, and they maintained that advantage over time. In addition, increased emphasis on academic education makes technical education critical. According to Paul Barton of the Educational Testing Service, getting more students to stay in school and graduate is likely intertwined with what students think high school completion has to offer them and how relevant it is to their success in the world.

Career technical education can affect that outcome. In this particular chart, you can see the results of a national study published this year found that low-testing students were 5 times less likely to drop out if about half their curricula was in career technical education.

We also need to support career clusters. The vocational curricula has changed dramatically. Support of career clusters can facilitate continued innovation. Perkins has already had a significant impact on the types of courses students take. As you can see in this chart, the number of CTE students enrolled in low-level math classes has dropped dramatically while those in high-level courses has increased dramatically. Examples of program change in Idaho is the CAD/CAM program at the Riverbend Professional-Technical Academy. For the last few years, they have competed in the underwater vehicle competition. Now, the bad news is that these high school and community college kids lost out to MIT and Cornell. The good news is they did manage to beat schools like the University of Colorado and the U.S. Naval Academy. This last year, they moved up to seventh place in the competition. Clusters can help promote and improve these changes. Idaho is currently about to launch a project in cooperation with the Department of Commerce and Labor to identify clusters under which Idaho will organize its professional-technical education.

Another thing that we need to do is to support professional development. I would like to highlight one project Idaho has focused on. This past year, we linked all of our technical curricula to the Idaho Achievement Standards. We have found, however, that without effectively teaching both academic and technical teachers how to integrate the academics, it simply does not happen. We have implemented several different types of training to facilitate integration.

We also need strong State leadership. The increased accountability and complexity demand careful planning and development. School districts simply do not have the resources to create quality curricula and accountability systems. Enough money needs to be reserved at the State level to make this happen.

Finally, we need to allow for flexibility and innovation. It seems like with all the additional pressures and requirements, some of us are just barely hanging on. We need Federal legislation that will encourage innovation that allows the States flexibility to incorporate that innovation with the rest of the educational enterprise. What do we know about career technical education? It provides technical employability and leadership skills. It motivates and engages students in their learning. It is of economic value to the individual and the community. It reinforces academic skills. And it enhances career and educational options.

Once again, I appreciate your time and look forward to your questions. Thank you.

[The prepared statement of Mr. Rush follows:]

PREPARED STATEMENT OF MICHAEL RUSH, PH.D.

Good morning Chairman Enzi, Senator Kennedy and Members of the Committee. Thank you for the opportunity to share my thoughts on the Federal investment in career technical education or as we call it in Idaho: Professional-Technical Education. As State Administrator for Professional-Technical Education, I am responsible for funding Idaho's 760 high school programs and six technical colleges, serv-

ing almost every high school student in the State and over 42,000 post secondary students, including adults. Our agency provides technical assistance, curricula, assistance with accountability, and leadership for innovation.

I am also the President of the National Association of State Directors of Career Technical Education Consortium. Established in 1920, the Consortium serves as the professional society of State and territory agency heads responsible for public career technical education at the secondary, postsecondary and adult levels in all 50 States, 8 U.S. Territories, and the District of Columbia. I request that the association's recommendations for Carl D. Perkins Vocational and Technical Education Act (Perkins) reauthorization be included in the record.

Mr. Chairman and Members of the Committee, the work you do really does make a difference in the lives of students across the country. The decisions you make, and even the speed at which they are made, significantly affect our ability to create opportunities for students. One such student is Chelsie Lea Marler. Chelsie took professional-technical classes in welding, auto technology, mechanics and power technology in her home high school, Meridian High. As a high school senior, she enrolled in an automotive collision repair program at the Dehryl Dennis Technology Center. During this time, Chelsie took advanced placement academic classes and was President of her Skills-USA chapter. She is now enrolled in the auto body program at the College of Southern Idaho, and intends to continue her education to become an auto collision forensics investigator.

Chelsie's experience reflects the characteristics of modern career technical education: (1) solid technical skills development that provides opportunities for employment and advancement; (2) the integration of high-level academics and technical preparation that prepares students for the future; (3) the articulation of career technical education, from comprehensive high school programs to technical centers to 2-year colleges and beyond; and (4) the development of leadership and other workplace skills critical to success in life.

BUILDING ON WHAT WORKS

At every level of Chelsie's educational experience, Perkins dollars were used to provide opportunities that would not have otherwise existed. As you begin deliberations on what the Federal investment in career technical education will look like in the future, I offer the following observations and recommendations, which, share at their foundation legislative, programmatic, and fiscal support for States.

Recommendation: Maintain a focus on the improvement and acquisition of technical skills.

Representing only about 3 percent of the Federal education budget, Perkins funding for career technical education is limited.¹ Nonetheless, this investment is critical to assuring a national focus on technical skills development and improvement. While Perkins has promoted the integration of academic and technical education—which I wholeheartedly support—we cannot afford to dilute its focus. It has been suggested that Perkins dollars should be used to fund general high school reform. Any attempts to finance high school reform with Perkins dollars would only serve to severely limit the operation of the country's technical education programs, they would not—indeed they could not—significantly impact academic performance.

It is also important to remember that although career technical students are increasingly likely to pursue postsecondary education, the vast majority of all American students do not graduate from high school and immediately enroll in college.² This majority of students should have access to quality career technical education programs that support their decisions on when to enter the workforce. Students should not and do not have to make a choice: education or work. Quality secondary career technical education programs prepare students for both. Research has found that quality career technical education programs help ensure better alignment to ca-

¹ U.S. Department of Education, Office of the Under Secretary, Planning and Evaluation Service. "National Assessment of Vocational Education: Interim Report to Congress." Washington, DC. (2002).

² Rosenbaum, J. "Beyond Empty Promises." *Preparing America's Future: The High School Symposium*. (2002).

reer goals (shortening those years of finding oneself before beginning a career),³ prevent dropouts,⁴ and improve both academic and technical achievement.⁵

Recommendation: Ensure coordination of funding streams.

One of the real success stories in Idaho has been the coordination of the Basic Grant with Tech Prep. Although it has taken some time to build the infrastructure, every school district and technical college in Idaho is in a tech prep consortium. The principles of academic integration and articulation between secondary and post-secondary education have been used to improve all of the technical programs. In addition, basic grant dollars are used to support tech prep activities at the local level. This year, Idaho experienced a 54 percent growth in professional technical students who signed up for the tech prep sequence; and in 2003, students earned nearly a million dollars worth of academic credit while still in high school through tech prep. Making sure that the programs within Perkins are coordinated and contribute in a non-duplicative way is critical to making the most out of the legislation.

Recommendation: Promote the collection and dissemination of information about the world of work and the preparation necessary to successfully enter it.

The U.S. economy and workforce are rapidly changing. "These [demographic] developments pose potential problems for employers and the economy generally, as the possible loss of many key experienced workers could create shortages . . . with adverse effects on productivity and economic growth."⁶ It is essential that we encourage the realization of the full workforce potential of all Americans. Not only do we need to engage and prepare more Americans for participation in the labor market, we need to be sure that they are prepared with the skills and knowledge necessary for careers that exist. Many occupations that once dominated our economy are practically non-existent now. As technology continues to change, the skills necessary for work are constantly altered. For example, a major employer in Idaho went from having no servers and less than 100 personal computers to having 1,300 servers and over 15,000 laptops in only 10 years. Students who started in 1st grade at the beginning of this trend were just getting started in high school at the end of those 10 years. Critical to making the connection between what is happening in the workplace and what needs to be learned in the classroom is ensuring that parents and students have access to quality information about career and education options. In Idaho, our Career Information System produces quality Idaho information that is shared among schools, job service, and virtually all other entities that need to provide career information. A national, generic web program can simply not meet this need.

Recommendation: Support Career Clusters as means to:

- Enhance the integration of academic and technical education,
- Support effective transitions from one level of education to the next without penalizing entry into the workforce at all levels, and
- Promote the development of solid technical skills.

In addition to being prepared for careers that exist today, students must also have the skills and knowledge necessary for the changing workforce of the future. Career technical education must therefore prepare students with transferable skills that enhance success in a wide variety of educational and work environments. To achieve this goal, programs must: incorporate high quality and up-to-date curricula; involve business and industry; align standards, assessments, and accountability measures; and promote leadership development through student organizations.

Programs that deliver high-level skills while integrating academic concepts have grown significantly in Idaho. The Computer Aided Manufacturing program at the Riverbend Technical Academy in Post Falls is one good example. For each of the past few years, the students in this program have competed in the national autonomous underwater vehicle competition in San Diego. The bad news is that 2 years ago these high school and community college students—with help from a local engineering firm—lost out to MIT and Cornell. The good news is that they beat the U.S. Naval Academy and the University of Colorado. This year they moved up to 7th place. Other programs such as the Shelley High School Ecology and Environmental Science Program further demonstrate the scope and depth of career technical programs. Live research projects in conjunction with the Idaho National Engineering

³Ferris State University Career Institute for Education and Workforce Development. "Decisions Without Direction: Career Guidance and Decision-Making Among American Youth. Executive Summary." (May 2002).

⁴Plank, S. "Career and Technical Education in the Balance." *National Research Center for Career and Technical Education*. (2001).

⁵Frome, P. "HSTW: Findings from the 1996 and 1998 Assessments" *Research Triangle Institute*. (2000).

⁶United States General Accounting Office. "Older Workers: Demographic Trends Pose Challenges for Employers and Workers." Washington, DC. (November 2001).

and Environmental Lab and the Idaho Fish and Game strengthen both the technical and academic content. Idaho has also begun to experiment with career academies. For some time, most of our high schools have used career pathways as the organizing construct for their course catalogs. A number of schools have also implemented one or two academies in areas such as Finance, Travel and Tourism, Information Technology, and Health. A new stand-alone medical arts academy and a new high school being organized completely around five academies are the latest efforts to implement this educational reform tool.

Nationally, the level and types of math courses taken by career technical concentrators have shifted over the past 20 years—the number of concentrators taking low level math classes has dropped drastically, while the number taking high level courses has risen dramatically.⁷ This past year, our office has worked to align all of the career technical competencies with Idaho's academic achievement standards. This has provided the tool for career technical teachers and academic teachers to work together to improve academic performance.

Although Idaho is making significant progress in improving the quality of its career technical education system, supporting the continued development and implementation of Career Clusters in Federal legislation can help us achieve even more. States and locals would be better positioned to meet local labor market needs and achieve the goals of better integration and improved transition if support for Career Clusters was incorporated in the new law.

Career Clusters are an organizing framework for all of the careers in our economy. A Career Cluster: links secondary- and postsecondary-level coursework; integrates academic, technical, and employability skills; and aligns curricula to industry standards, certifications, and assessments. By aligning with the current needs of the economy, the implementation of Career Clusters also helps schools expand their vision for career technical education. Career Clusters extend beyond the traditional program areas commonly associated with career technical education, representing professions in all industry sectors, such as education, law, public safety, and health. This broadened focus ensures that students have the opportunity to learn, at many different levels, about the countless career opportunities available to them.

Career Clusters can also help link economic development to the educational delivery system. Idaho is just about to begin an initiative to create a set of career clusters with the cooperation of the Department of Commerce and Labor thus connecting education and business.

Recommendation: Support the historical Federal role in education—increasing access and equity.

Since students are exposed to numerous professions in broad career areas and not just specific jobs, Career Clusters can also be a valuable tool in breaking down the gender stereotypes associated with certain careers. For example, in traditional career technical education, a student might enroll in a licensed practical nurse program and take courses that would lead to the degree or credentials needed in that State to be a licensed practical nurse. A student who enrolls in the health occupations clusters, however, will be exposed to all of the careers in the broad health field, including nurses, physicians, surgeons, surgical technicians, radiologists, and medical lab technologists. Every student enrolled in a health career cluster program will be exposed to all of the careers in the field, thus supporting enrollment and completion in non-traditional programs of study. Idaho just started its first Medical Arts Academy this past year.

Recommendation: Support the development of technical assessments.

One key to ensuring quality career technical education programs is the alignment of curriculum, instruction, professional development, standards and assessments. Measuring technical competency is one of the biggest challenges in career technical education, as not all programs or career areas have standards, certifications, or assessments. The variety of careers makes it difficult to synthesize the critical knowledge of all professions into a single test, as we do in academics.

Collectively, State Directors have taken a first step in achieving the alignment of curriculum, instruction, professional development, standards and assessments. We worked with employers and secondary and post secondary educators to identify what people need to know and be able to do to be successful in broad career areas, and then had these competencies nationally validated. Schools and States are now using them to benchmark and update their curricula, enhance career guidance and counseling strategies, more effectively integrate academic, technical and employ-

⁷Stone, J. "The Role of CTE in Preventing Dropouts." Presentation on behalf of the National Research Center for Career and Technical Education at the National Association of State Directors of Career Technical Education Consortium 2004 Spring Conference, Washington, DC. (April 22, 2004).

ability skills, and promote better transitions between education and the workforce. This is a good foundation on which to build quality curriculum and instruction, but assessments are the missing component. The development of technical assessments to support the Career Clusters would do much to ensure quality assessment of technical competence. The assessments would also provide better support for the more mobile and global workforce and economy of today. A special national project on assessments could be a great help to States.

Recommendation: Continue to support professional development—including leadership development—and research.

As a nation, we place great value in leadership. We know strong education leaders are critical to effective organizations and the delivery of quality programs. The development of leaders is often overlooked. This is unfortunate, as it is the national, State, and local level leaders who will create and implement the future career-technical education. There is no question that with the graying of the career technical education community, a leadership crisis looms in the future.

*“Some suggest we are experiencing a crisis in education leadership of both quality and quantity. At the local level, few districts have made it a priority to identify and groom potential leaders, despite a wave of impending retirements and chronic difficulties in finding candidates.”*⁸

*“Nearly half of current community college presidents indicate they will be retiring in next 6 years. That figure jumps to nearly 80 percent in the next 10 years. Thirty-three percent of presidents believe that one-fifth of their chief administration will retire in the next 5 years.”*⁹

*“Today, State education agencies are now almost too lean. Reduced budgets starting in the 1980s stripped them of their capacity to fill many vacancies, much less expand to meet new demands. Too, salary levels have stayed low when compared to those of employees holding comparable positions in Federal and many municipal agencies, including school district headquarters. Even when SEA jobs are available, qualified experts and managers customarily find the prospects elsewhere to be more appealing.”*¹⁰

In Idaho, our agency has 37 percent fewer staff than in 1980, yet we have increased our administrative responsibility by five times. We have moved to close the gap by developing a Leadership Institute. We have also worked closely with teacher education programs. Nationally, however, the picture is grim. The case for developing educational leadership capacity is clear. It is in our national interest to invest in the support and development of leaders in career technical education.

Conducting and translating research into policy and professional development that influences practice is a valuable national role. The Federal legislation should offer support for professional development that helps practitioners access research-based strategies, learn about effective and exemplary programs and how to replicate them, and enhance their pedagogical and content expertise. This is important to ensure rigorous, relevant, and quality career technical education.

Improving the abilities of technical and academic teachers to integrate content has been one critical area of professional development in Idaho. We have found that without professional development, curricula and other forms of assistance are simply not sufficient. We have developed workshops in a variety of settings, including our statewide summer conference and in individual school districts’ professional development days, and conducted a semester-long class to provide more in-depth development opportunities for integration. This is an area that will require continued attention and effort.

Recommendation: Support accountability and provide States with additional authority to encourage performance and/or re-direct or withhold funds from schools when necessary.

Accountability is another State leadership responsibility critical to ensuring quality career technical education. The effective use of accountability data drives improvement and change. Idaho has worked hard to implement the existing measures and improve data quality. A new system is being implemented that will allow us to do much more, but this effort is time consuming and expensive. It is critical that States be given enough flexibility to manage the process. Separating the secondary and post secondary measures is also important in that it fosters the creation of post-secondary measures that better fit the system. In addition, using accountability data

⁸Olson, L. “Grant program aims to nurture school leaders.” *Education Week*. (January 10, 2001).

⁹Shults, C. “The Critical Impact of Impending Retirements on Community College Leadership.” Washington, DC: American Association of Community Colleges. (2001).

¹⁰Kister, J. “State Leadership for Career Technical Education.” Washington, DC: National Association of State Directors of Career Technical Education Consortium. (2001).

in a responsible and meaningful way will result in the identification of the strengths and weaknesses of both specific programs and the career technical education system in general. In Idaho, we work with schools that are struggling to meet performance goals by collaborating in the development of improvement plans that include additional technical assistance and professional development. When a school is challenged by persistent low performance, our State does all it can to keep the resources in place and provide the support necessary for the school to improve. Rarely, there are instances in which local programs simply will not make the effort to improve. In these instances, States need the legislated authority to be able to re-direct or withhold funds from local programs.

Recommendation: Support strong State leadership, with a minimum of 5 percent or \$500,000 for administration and 10 percent for leadership.

State leadership leads change, facilitates partnerships, ensures economy of scale, leverages multiple resources, and focuses accountability—all of which support quality career technical education. Others agree:

States hold the key to achieving vocational education reform at a pace and scale sufficient to affect national workforce quality (page 6). [S]tate leadership is the best bet to give context, shape, and direction to the diverse local reform activities already under way, and more broadly, convert them to coherent career preparations programs.—National Assessment of Vocational Education, 1994.

“Only State leadership at the State level can bridge the gap between national policymakers/administrators and local practitioners to energize change and drive needed reform.”—Dan Hull, President and CEO, CORD.

While I wear multiple hats—innovator, administrator, instructional leader, standards enforcer, data collector—my most important responsibility is ensuring student success. To accomplish this goal, adequate resources for strong State administration and leadership are necessary. My colleagues around the country and I strongly encourage the Congress to support States’ rights by continuing the Perkins provisions that allow States to select their sole State agency and determine the appropriate split of funds between secondary and postsecondary education. Further, we recommend the State administrative match, maintenance of effort provisions, and the level of funding reserved at the State level be maintained so innovations, such as those outlined today, can continue.

Recommendation: Allow for flexibility and innovation.

The diversity of our nation is one of its great strengths. Therefore, we cannot expect programs designed to fit Wood River Valley near Sun Valley to also meet the needs of Los Angeles or Boston. We need to maintain our focus on high standards for all States and students, while offering flexibility in how to best achieve quality results. Perkins can be a tremendous help, but only if it does not pile on too many additional requirements beyond those necessary for quality. Innovation is another distinguishing characteristic of the United States. Federal legislation should allow for a portion of funds to be used to innovate, without risk of penalty.

CONCLUSION

Career technical education is working. It:

- motivates and engages students in their learning;
- provides technical, employability and leadership skills that enable entry into and success in the workplace;
- reinforces and enhances academics;
- helps students find and fulfill their potential; and
- creates career and educational options.

As I began my remarks, I shared Chelsie Lea Marler’s success. Career technical education really did make a difference in her life, as it has done and continues to do for many Americans. For the past 87 years, Federal dollars have been an integral part of this success by ensuring that millions of youth and adults have been able to enter and succeed in the workforce. I believe that the recommendations I shared today will help ensure that future generations will have the same opportunities that Chelsie had. I would also encourage you to act rapidly. The current educational climate has created tremendous pressures and uncertainty for administrators, teachers, and students. Perkins can make a difference, but a solid direction is needed right away. I look forward to working with you to develop new legislation that builds on and expands our current successes and promotes innovation in our nation’s career technical education system.

Thank you.

Senator ENZI. Thank you very much.

Next we will hear from Dr. Frank Blankenship from Lisbon, OH. He brings 35 years of experience in education to his position as Assistant Superintendent and Vocational Director at the Columbiana County Career and Technical Center in Lisbon, OH. Dr. Blankenship is currently overseeing a series of comprehensive reforms aimed at raising school achievement at the Career and Technical Center as part of the "High Schools That Work" initiative. He has served as a high school social studies teacher, principal, and superintendent, as well as a coach and athletic director. He has served on various boards responsible for tech prep, special education, and computer technologies. Dr. Blankenship holds a master's degree in educational administration and a doctorate in educational leadership, both from Youngstown State University.

Dr. Blankenship.

STATEMENT OF FRANK BLANKENSHIP, Ed.D., ASSISTANT SUPERINTENDENT AND VOCATIONAL DIRECTOR, COLUMBIANA COUNTY CAREER AND TECHNICAL CENTER, LISBON, OH

Mr. BLANKENSHIP. Senator Enzi, Senator Bingaman, I am pleased to be here today to discuss with you the importance of the reauthorization of the Carl D. Perkins Vocational and Technical Education Act.

Senator ENZI. Could you move the microphone a little bit closer?

Mr. BLANKENSHIP. Is that better?

Senator ENZI. That is much better. Thank you.

Mr. BLANKENSHIP. As assistant superintendent and vocational director, I am responsible for overseeing career and technical education in Columbiana County, Ohio's most northern county in its Appalachian region. Located in the small town of Lisbon, the Columbiana County Career and Technical Center enrolls 400 students in grades 11 and 12 from all county school districts who are intent on completing a career and technical course of study.

Our students have shown significant achievement gains in both academic and career and technical studies over the past several years, gains which are measurable and data-driven. However, it was not always that way. The school improvement leadership team reviewed the results of fiscal year 2000 Secondary Workforce Development Report that was issued by the Ohio Department of Education and discovered that only 65 percent of our program completers met the graduation academic achievement standard. In addition, only 42 percent of the program completers achieved the benchmark on the Integrated Technical and Academic Competency tests. Thus, we were looking for a school improvement process that would provide some structure to assist us to increase student achievement.

The leadership team selected the Southern Regional Education Board's "High Schools That Work" program as the school improvement initiative to guide our school improvement efforts. "High Schools That Work," which focuses on combining challenging academic courses and rigorous career and technical studies to raise the achievement of secondary students, has provided a results-oriented focus for reform while also providing a system of staff accountability. An on-site "High Schools That Work" Technical Assistance

Visit, held every 2 years, gathers information related to the current operations of our school and sets forth challenges for our leadership team to undertake over the next 2 years. The data gathered during these visits has helped our staff determine the success of our reform efforts by measuring student achievement gains.

“High Schools That Work” has also helped us target our reform efforts where they are most needed. Rewriting all courses of study to reflect academic and career and technical standards, creating syllabi for all courses to provide structured information to students and parents are just two suggestions offered for us to consider. However, realigning all academic courses to meet the content standards approved by the Ohio Department of Education presents the biggest challenge for our teachers. This has required systemic changes in the delivery of instruction. Our academic teachers now deliver instruction with contextual strategies rather than with contextual content. We no longer teach “machine trades math.” We now teach trigonometry with a “machine trades context.” We believe this is more credible instruction and makes us more accountable to students, parents, higher education, and the business world.

At the Columbiana County Career and Technical Center, career and technical pathways of study are offered in clusters of trade and industry, health services, information technology, agriculture, and family and consumer services. These career pathways of study focus on industry-based competencies which are measured by administering certification exams. Examples of certification exams include the American Welding Society certification exam for the welding and metal fabrication career path, State licensure exams for cosmetology and health services career paths, and A-Plus and Cisco networking certifications for the information technologies career paths.

Currently, we have 16 articulation agreements with seven different academic and technical postsecondary institutions. These agreements afford students opportunities to earn post-secondary credits upon completion of computer networking technologies, interactive media, health services, automotive services, early childhood education, culinary careers, and careers for teachers programs of study. Four of these programs are sanctioned tech prep programs. These universities, community colleges, and technical schools have reviewed the secondary courses of study and have determined the correlated course work that students will be credited upon entrance to the respective postsecondary institution. These industry certification and postsecondary articulation opportunities allow students from the Columbiana County Career and Technical Center to enter the workforce and to continue a program of study with credible skills and qualifications that should ensure them success and immediate productivity. While these opportunities are many, the goal of the Career and Technical Center is to continue to expand the articulation and certification opportunities to allow our students unlimited options. The benchmark that we have targeted for post-program placement is 95 percent. That means that 95 percent of the career and technical program completers either are to be enrolled in higher ed, technical education, or employment related to their secondary field. When we looked at our data, the 2003 program completers, the placement rate was 91 percent.

Having the ability to commit the resources to have all of these programs implemented is critical. And so I thank you for the opportunity to share some of the exciting educational practices being implemented in a small rural Appalachian county career and technical school, and I urge you to support the reauthorization of the Perkins Act to allow our school, as well as others, to continue the journey of changing the methods of delivery career and technical education to better prepare our students for the information economy.

Thank you.

Senator ENZI. Thank you very much.

[The prepared statement of Mr. Blankenship follows:]

PREPARED STATEMENT OF FRANK BLANKENSHIP, ED.D.

Mr. Chairman and Members of the Committee, I am pleased to be here today to discuss with you the importance of the reauthorization of the Carl D. Perkins Vocational and Technical Education Act. As assistant superintendent and vocational director, I am responsible for overseeing career and technical education in Columbiana County, Ohio's most northern county in its Appalachian region. Located in the small town of Lisbon, the Columbiana County Career and Technical Center enrolls 400 students in grades 11 and 12 from all County school districts who are intent on completing a career and technical course of study.

Our students have shown significant achievement gains in both academic and career and technical studies over the past several years, gains which are measurable and data-supported. However, it wasn't always this way. Faced with declining enrollment, our school improvement leadership team reviewed the results of the FY2000 Secondary Workforce Development Report issued by the Ohio Department of Education and discovered that only 65 percent of students who completed our program achieved the graduation academic achievement standard. In addition, only 42 percent of the program completers achieved the benchmark on the Ohio Integrated Technical and Academic Competency assessments. Thus, we knew we needed a school improvement process that would provide some structure to assist us in increasing student achievement. The leadership team selected the Southern Regional Education Board's "High Schools That Work" program to guide our school improvement efforts. HSTW, which focuses on combining challenging academic courses and rigorous career and technical studies to raise the achievement of secondary students, has provided a results-oriented focus for reform while also providing a system of staff accountability. An on-site, HSTW Technical Assistance Visit, held every 2 years, gathers information related to the current operations of our school and sets forth challenges for our leadership team to undertake over the next 2 years. The data gathered during these visits has helped our staff determine the success of our reform efforts by measuring students' achievement gains.

HSTW has also helped us target our reform efforts where they are most needed. Rewriting all courses of study to reflect academic and career and technical standards, and creating syllabi for all courses to provide structured information to students and parents are just two suggestions offered for us to consider. However, realigning all academic courses to meet the content standards approved by the Ohio Department of Education presents the biggest ongoing challenge for our teachers. This has required systemic changes in the delivery of instruction. Our academic teachers now deliver instruction with contextual strategies rather than with contextual content. We no longer teach "machine trades math." We now teach trigonometry with a "machine trades context." We believe this type of instruction better serves our students and makes us more accountable to parents, higher education and the business world.

At the Columbiana County Career and Technical Center Career, career and technical pathways of study are offered in the clusters of Trade and Industry, Health Services, Information Technology, Agriculture, and Family and Consumer Services. These career pathways of study focus on industry-based competencies which are measured by administering certification exams. Examples of certification exams taken by our students include American Welding Society certification for the welding and metal fabrication career path, State licensure exams for the cosmetology and health services career paths, and A+ and Cisco Networking certifications for the information technologies career paths.

Currently, we have 16 articulation agreements with seven academic and technical institutions. These agreements afford students opportunities to earn post-secondary credits upon completion of computer networking technologies, interactive media, health services, automotive services, early childhood education, culinary careers, and careers for teachers programs of study. Four of these programs are sanctioned tech prep programs. These universities, community colleges and technical schools have reviewed our secondary courses of study and determined the correlated coursework that students will be credited upon entrance to the respective post-secondary institution. These industry certification and post-secondary articulation opportunities allow students from the Columbiana County Career and Technical Center to enter the workforce and/or continue a program of study with credible skills and qualifications that should ensure them success and immediate productivity. While these opportunities are many, the goal of the Career and Technical Center is to continue to expand articulation and certification opportunities to allow our students unlimited post-secondary options. The benchmark that we have targeted for post-program placement is 95 percent. This means that 95 percent of career and technical program completers are enrolled in higher education, technical education and/or employment related to their secondary field of study. The 2003 program completers had a post-program placement rate of 91 percent. As a result, the staff is currently making plans to restructure a Job/College Fair which is held at our Center to allow greater participation of schools and businesses as well as students.

Each student who completes a career path program of study receives a career passport that includes a resume, technical certifications, licenses, endorsements and an "I can" list of major technical and employability competencies in their career field. These passports are used by the students as portfolios to gain entry into their next phase of life.

"I can" lists are recorded accomplishments of students that are monitored by the career and technical teacher over the 2 years students are enrolled in the program of study. For example, in the health services career path of study, student competencies are measured in areas such as medical terminology, medical law and ethics, clinical chemistry, microbiology, computer literacy, teamwork and professionalism. Under the "first aid and medical emergencies" category, students must be able to identify emergency procedures, perform first aid, maintain cardiopulmonary resuscitation proficiency and respond to medical emergencies. Thus, potential employers will have a greater understanding of students' capabilities after reviewing the "I can" lists as presented in the career passport.

All students who complete a career path course of study must participate in Ohio's Integrated Technical and Academic Competency assessment program. The competencies assessed by the ITACs are reflective of the "I can" lists included in the career passports. Students who master the "I can" lists have been able to meet or exceed the benchmarks on the ITACs. Students in all but one career path program of study met their respective career path ITAC benchmark during the 2004 assessment. This is an improvement from the 2003 assessment, when two career path programs of study failed to meet the established benchmarks. The pass rate on the ITACs has risen from 58 percent in 2002 to 76 percent in 2003 to 80 percent in 2004. We believe that our effort to reflect industry standards in career path courses of study—which have been overhauled over the past 2 years—is the main cause of this dramatic improvement in student achievement. The alignment of what is being taught and what is being assessed allows the measurement process to be authentic.

Completion of a career path program of study earns a student a Certificate of Completion in his or her career and technical field. However, a student may earn an Honors Certificate of Completion if he or she has maintained a 91 percent average in the career path program of study, a 95 percent attendance rate, and met all of the benchmarks on the ITAC assessment. Ten percent of the program completers earned honors certification in 2003 and 16 percent earned honors certification in 2004.

The majority of students who attend the Career and Technical Center also receive instruction in academic studies at the Center. All students take English, mathematics, science and social studies in both the Junior and Senior years on a 4x4 semester block schedule. These students are "cluster scheduled" into their academic classes to facilitate the use of contextual learning instructional strategies. Cluster scheduling results in students from the same career area of study being placed into the same math and science classes. For example, students from any of the trade and industry career area could be scheduled together, allowing instructors to relate the math and science concepts to the application in the career area during the instructional process. Learning math and science in this context also enhances students' understanding of these subjects. A randomized selection of program completers that

participated in the High Schools That Work assessment in 2002 showed an increase in mean reading score from 255 to 287, an increase in mean mathematics score from 290 to 299, and an increase in mean science score from 273 to 302. These scores compared students from 2002 who were not cluster scheduled to students from 2002 who were cluster scheduled.

Getting students to read has been a major focus of our staff. Classrooms have a library of journals and other materials to encourage students to read throughout the day, not just when they go to the media center. Teachers honor students' choices of what to read, whether it is an auto service manual, a dirt bike magazine or a classic novel. When the teachers found that many of the reluctant readers preferred nonfiction books and articles, they asked for more nonfiction and informational reading materials. Multiple copies of the local newspapers are also available for the students. By giving students a choice of reading materials and reminding them of the necessity of being able to read to be successful in the real world, students are beginning to develop an interest and gain a sense of appreciation and satisfaction for the process of reading rather than perceiving reading to be just another school required activity.

Of course, it is important to allocate resources to facilitate the types of systemic changes our career and technical center has been implementing. While the staff has certainly been willing to implement new strategies for delivering instruction, training is a critical component for successful staff transition to creating contextual learning classroom environments. Purchasing additional learning materials, textbooks, computers, software and equipment is also important as our staff upgrades programs to reflect both academic and industry standards. The Columbiana County Career and Technical Center receives \$225,000 annually from the Carl D. Perkins Vocational and Technical Act to help support the changes in secondary education being implemented. While we would certainly still attempt to accomplish the same educational goals without Perkins funding, I do not believe that we would be able to be as results-oriented without these resources.

I thank you for the opportunity to share some of the exciting educational practices being implemented in a small rural, Appalachian county career and technical school and I urge to you support the reauthorization of the Perkins Act to allow our school, as well as others, to continue the journey of changing the methods of delivering career and technical education to better prepare our students for the Information Economy.

Senator ENZI. Our next witness comes from Wyoming, and it is good to see you again. Dr. McFarland became Wyoming's first woman college president when she assumed the presidency of Central Wyoming College in 1989. There are only seven community colleges in Wyoming, so there are not that many opportunities. Dr. McFarland grew up in Wyoming and holds an associate degree from Cottey College for Women and a B.A. with honors in speech, theater, and an M.A. in curriculum and instruction, both from the University of Wyoming. Dr. McFarland completed her Ph.D. in communications from the University of Utah. Prior to becoming CWC president 15 years ago, Dr. McFarland served as CWC's Dean of the College, Division Chair of Humanities, and Professor of English, Communications, and Theater.

Dr. McFarland.

**STATEMENT OF JO ANNE MCFARLAND, Ph.D., PRESIDENT,
CENTRAL WYOMING COLLEGE, RIVERTON, WY**

Ms. MCFARLAND. Thank you. Mr. Chairman, Senator Bingaman, and distinguished Members of the committee, I bid you greetings from the great State of Wyoming, where we have more miles on our snow blowers than we have on our cars, where we think of the beginning of elk season as a national holiday, where we have two seasons—winter and the 4th of July—and where I recently discovered we handwrite our airline baggage tags so that, if lost, we can be certain they are nowhere in the system.

As Chairman Enzi said, my name is Jo Anne McFarland, president of Central Wyoming College, which is a public, 2-year comprehensive community college located in Riverton, WY, which is within the exterior boundaries of the Wind River Indian Reservation. Most of our students are first-generation, “at risk,” or economically disadvantaged students. Twenty percent of our students are Native American, with roughly that same percentage of our 2-year graduates being Native American, I am proud to say. Nestled in the Wind River mountain range, Central Wyoming College serves the counties of Fremont, Teton, and Hot Springs, which captures a population of about 60,000 people spread over 15,000 square miles. CWC’s head count is about 2,000 credit students, and that equates to about 1,400 full-time equivalent students. We are small.

My special thanks to Wyoming’s Senator, the Honorable Mike Enzi, who is chairing this morning’s hearing, for extending me an invitation to address your committee. I would also like to acknowledge that help and support of the American Association of Community Colleges and the Association of Community College Trustees. I can think of no better reason to take a 6:00 a.m. plane from Riverton yesterday, after a late night board meeting the day before, to attend today’s hearing with regard to the Carl Perkins reauthorization.

My first main point is that most new jobs require some form of postsecondary education. A high school diploma alone no longer does it. The Carl D. Perkins Vocational and Applied Technology Act defines “vocational and technical education” as offering a “sequence of courses that provides individuals with the academic and technical knowledge and skills the individuals need to prepare for further education”—and here is the key—“for careers that do not require a baccalaureate degree.”

A U.S. Department of Labor study has noted that 80 percent of the new jobs created between the years 2000 and 2010 will require some postsecondary education, but less than a bachelor’s degree. And according to a 2003 study entitled “Standards for What?” by Carnevale and Desrochers, even though, on average, workers with associate degrees earn less than those with bachelor’s degrees, 83 percent of workers with associate degrees earn the same as workers with bachelor’s degrees. The truth of the matter is that many people, many of whom are single wage earners for their families, who try to raise a family with only a high school diploma, end up at community colleges at some point in their life.

My second main point: Community colleges are experienced in providing career technical training for the broadest range of students. I was pleased to hear Senator Enzi talking about K–16 and seamless arrangements and pathways. Community colleges are well experienced in providing job skills, training, whether for high school students who are dually enrolled in both high school and the community college, recent high school graduates, or for those who for whatever reason have dropped out of high school, been laid off, or need to upgrade or retool for a different or emerging job. The average age of community college students is 29. We have always been known as the “people’s colleges,” primarily because of our access and affordability.

I think it is important that we realize that colleges are close to the communities and businesses we serve. Community colleges rely heavily on business advisory committees for their programs. And we are certainly very challenged in Wyoming to serve a rural population.

The bottom line is that the Perkins Act has been around for a long time. My father, who taught for many years in vocational agriculture in the great State of Wyoming, remembers well the Smith-Hughes Act of 1917. Perkins was renamed in 1984. It continues to work. We urge you to allow the Perkins to be reauthorized, and at minimum, we ask that the postsecondary performance indicators be refined and developed to better suit the needs of community colleges who serve a very broad range of our students.

[The prepared statement of Ms. McFarland follows:]

PREPARED STATEMENT OF JO ANNE MCFARLAND, PH.D.

AN ANALYSIS OF THE BENEFITS, PROBLEMS, AND SUGGESTED CHANGES TO THE
PROPOSED PERKINS LEGISLATION

INTRODUCTION

I would like to thank the Honorable Chairman, Ranking Member Kennedy, and distinguished Members of the Committee. My name is Jo Anne McFarland, President of Central Wyoming College, which is a public 2-year comprehensive college located in Riverton, Wyoming, within the exterior boundaries of the Wind River Indian Reservation. Most of our students are first-generation, "at risk," or economically disadvantaged students. Twenty percent of our students are Native American, with roughly that same percentage of our 2-year graduates. Nestled in the Wind River mountain range, Central Wyoming College serves the counties of Fremont, Teton, and Hot Springs. CWC's headcount serves over 2,000 credit students for a full-time equivalent credit population of 1,350.

My special thanks to Wyoming's Senator, the Honorable Mike Enzi, who is chairing this morning's hearing, for extending me an invitation to address your committee and to Senator Enzi's policy analyst Scott Fleming for his assistance. I also wish to acknowledge the support and leadership of the American Association of Community Colleges and the Association of Community College Trustees, and state my support for their positions on the reauthorization of the Carl D. Perkins Vocational and Technical Education Act.

MOST NEW JOBS REQUIRE SOME FORM OF POSTSECONDARY EDUCATION

The Carl D. Perkins Vocational and Applied Technology Act defines "vocational and technical education" as offering a "sequence of courses that provides individuals with the academic and technical knowledge and skills the individuals need to prepare for further education and for careers other than careers requiring a baccalaureate." A U.S. Department of Labor study has noted that 80 percent of the new jobs created between 2000 and 2010 will require some postsecondary education, but less than a bachelor's degree. According to a 2003 study entitled *Standards for What?* by Carnevale and Desrochers, even though, on average, workers with associate's degrees earn less than those with bachelor's degrees, *eighty-three percent (83 percent) of workers with associate degrees earn the same as workers with bachelor's degrees*. The "American Diploma Project" also notes that students planning to go to work after high school need as rigorous a curriculum as those planning to go to college. All of this points to the importance of postsecondary programs to the career and technical education (CTE) system. A reauthorized Perkins Act should better reflect and support the role of postsecondary programs in the CTE system. By strengthening support for postsecondary programs, the Perkins Act would better serve the CTE system as a whole.

The truth of the matter is that many students who try to raise a family with only a high school diploma end up at the community colleges at some point in their lives. High school CTE programs should contain the rigorous academics necessary to equip their students with the tools necessary to pursue any of their options after graduation, whether they decide to enter the workforce or immediately pursue postsecondary education. The best bet is for high schools to focus on rigorous preparation in math, reading, and English, as well as some career exploration that focuses

students' attention on necessary, sequential, and relevant postsecondary training. We also know that community colleges are best fitted to provide job skills training, whether for recent high school graduates or for those who for whatever reason have dropped out of high school, been laid off, or need to upgrade or re-tool for a different or emerging job. Community colleges and high schools must work together to provide career pathways that lead to productive lives.

COMMUNITY COLLEGES SERVE THE BROADEST CLIENTELE

Community colleges, by their very nature, are designed to respond to the local needs by creating appropriate training programs on a short notice, whether they arise due to changes in technology, worker shortages, or industry layoffs. Compared to other sectors of education, student enrollment in the Nation's community colleges is growing faster and represents a broad clientele. The Center for Policy Analysis at the American Council on Education (ACE) released a brief just last week, on June 15, 2004, entitled: *Choice of Institution: Changing Student Attendance Patterns in the 1990s*. Using data from the Department of Education's National Center for Education Statistics, it showed that in the 1990s, the share of undergraduates enrolling in community colleges increased from 39 percent in 1989 to 41 percent in 1999, resulting in an enrollment gain of approximately 248,000 students. Enrollment in community colleges grew by 14 percent during the 1990s, or approximately 5 percentage points more than all of higher education, which grew by 9 percent during the same time. The same study also showed that over 70 percent of students attending community colleges are "independent," adult, older, and may be married and/or have children. Early indications are that this enrollment trend at community colleges will continue and even grow stronger in this decade.

With the average student age of approximately 29 years, community colleges serve a number of older-than-average, non-traditional students, including single parents and displaced homemakers. A high percentage of these students come from economically disadvantaged backgrounds; they greatly benefit from programs currently supported by the Carl D. Perkins Vocational and Technical Education Act, and other workforce initiatives. Through these sources, community colleges receive critical funds to provide training opportunities to students in technical fields where skilled workers are badly needed.

ABOUT COMMUNITY COLLEGES

I am proud to be affiliated with community colleges which have always been known as the "People's colleges," primarily because of their access and affordability—and the fact that community colleges take students of all abilities and backgrounds.

It is fitting that the community colleges should be engaged in career-technical training because the community colleges have been engaged in workforce development for—in the case of Northwest College and Casper College as long as the past 60 years, and in the case of Central Wyoming College for almost 40 years. Much of that work we have done quietly and without fanfare. But we have always been about educating Wyoming's citizens of all ages, and most of our graduates stay in Wyoming.

A little about our State's seven community colleges. We are comprehensive community colleges. As comprehensive community colleges, we have three primary roles:

1. To provide the first 2 years of a 4-year degree for transfer to a 4-year college or university. Many community college so-called transfer degrees are in such areas as nursing, accounting, or economics—areas that specifically relate to the workforce.

2. Secondly, comprehensive community colleges provide applied degree programs to prepare our students for immediate entry into the workforce. In addition to offering 2-year applied associate degree programs, the colleges offer a number of 1-year applied diplomas, as well as intensive credential programs, from 4 to 8 weeks in length.

3. Finally, the colleges also offer non-credit continuing education for job skills upgrades, as well as non-credit offerings to pursue recreational, leisure, and personal development interests.

But Wyoming community colleges, which together have a presence in all 23 counties in the State, are different from most of the other over 1,600 community colleges in the country in a couple of significant ways. First, Wyoming's community colleges far surpass the national community college market penetration rate. Nationally, the community college penetration rate is 4.6 percent, compared to a whopping 6.92 percent penetration rate for Wyoming's community colleges. Secondly, because our population is so small and because our towns are so far away from each other, Wyo-

ming's community colleges serve not only as educational centers for their service areas, but they also serve as the cultural and recreational centers for the communities in their service areas. Our colleges are governed by locally elected boards, and their facilities are widely used by the communities. We are close to the people we serve. We host high plays in our theatres and provide a stage for the Kiwanis Stars of Tomorrow. The colleges provide camps, concerts, and art shows—and serve as community meeting places. For example, little old Central Wyoming College had over 100,000 people over the past year attend events in our Arts Center Theatre. These are events not associated with regular college offerings. The colleges improve the cultural and educational lives of their communities.

The colleges are a great attraction to potential incoming businesses and should be recognized as such. Wyoming's community colleges ARE part of the communities they serve—and are highly responsive to their needs. We're small, and we're flexible.

THE CHALLENGES OF SERVING A RURAL POPULATION

The population of Wyoming is less than one-half million people spread over 38,000 square miles. Only three of Wyoming's cities and towns have populations of at least 50,000. CWC's service area alone encompasses almost 60,000 people spread over 15,000 square miles. Our service area includes Jackson Hole, which is 150 miles over a high mountain pass; Thermopolis to the north of us is 75 miles away through the Wind River Canyon. Fort Washakie on the Wind River Indian Reservation is a 45-minute trip away from the main campus in Riverton. Because of the small population spread over vast distances, we are highly dependent upon distance education as a means to deliver our courses. In Fremont County alone, we have 8 public school districts and one Bureau of Indian Affairs school. Students from Jeffrey City have to travel 160 miles roundtrip each day by bus to Lander. Because of the small number of students in each school (classified as "frontier" schools by the Federal Government), Wyoming's small schools individually lack the resources to keep up with today's career and technical education needs. Gone are the days when wood shop and auto mechanics can meet the needs of a highly technical global economy. Without sharing of resources through partnership with the college, students from high schools, as well as from the college, would have very limited choices in career and technical training. To give you an idea of the sizes of some of our high schools, the following chart indicates the numbers of high school juniors and seniors in Fremont County public schools:

JUNIOR AND SENIOR HIGH SCHOOL ENROLLMENT IN FREMONT COUNTY

FCSD #1	361
FCSD #2	47
FCSD #6	73
FCSD #14	86
FCSD #24	52
FCSD #25	387

Examples of career-technical programs eliminated in Fremont County high schools, due to lack of funding:

- Microsoft Authorized Academic Training Academies
- Cisco Internetworking Academies
- Health Occupations Program
- Welding (reduced to ½ time)
- Agriculture (reduced to ½ time)
- Food Service Industry Program
- Business and Office Program
- Marketing Education
- Accounting
- Drafting (reduced to ½ time)
- Family and Consumer Science
- Computer Science (Programming)
- Graphic Arts and Journalism (Broadcast and media)
- Auto Maintenance
- Building Trades and Construction
- Parenting and Child Development Program
- Vocational Clubs are being eliminated as well: FBLA, DECA, and FHA

Without strong partnerships with community colleges and the sharing of resources through tech-prep arrangements and dual enrollment, high school students in Wyoming would have extremely limited career-technical training options. Sharing of resources between the high schools and college in partnership can provide career-technical training to an even broader range of students.

DEPENDENCE UPON CARL PERKINS FUNDING

We are also highly dependent upon Carl Perkins funding to provide needed funding for career and technical equipment and services. This upcoming year, Central Wyoming College is slated to receive \$174,581 in Perkins funding. This might seem like a small amount. However, without this assistance, CWC and its secondary partners would be deprived of needed up-to-date career and technical training and services. Currently, only a total of \$4.2 million comes to Wyoming in Perkins funding, and only \$1.2 million of that comes to Wyoming's seven community colleges. If that amount were reduced by 25 percent, as proposed by the Administration in its fiscal year 2005 budget, Wyoming's seven community colleges would have share \$900,000. That leaves even *less* to do the *more* that is needed to train today's students for tomorrow's jobs.

We have heard quite a bit about workforce development requiring the three Es: education, economic development, and employment. I will use the five P's to briefly capture what Wyoming's community colleges are doing in the area of workforce development. It's what I call P to the 5th power.

I refer to the five Ps—or P to 5th power—as follows:

1. Partnerships
2. Pathways
3. Planning
4. Patronage
5. Passion

First—Partnership. As colleges based in and serving local communities, the colleges are adept at partnerships—a critical element in successful workforce development. Since their establishment between 40 to 60 years ago, the community colleges have depended upon community advisory boards to ensure that our applied degrees are serving employer needs. Let me give you some examples of community college partners:

- Wyoming Department of Workforce Services and Vocational Rehabilitation
- Wyoming Workforce Development Council
- Wyoming Workforce Alliance
- One-Stop Workforce Committees and Entities
- Wyoming Youth Council and county one-stops
- Wyoming Business Council
- City, county, and State (WEDA) economic development organizations
- Local and area businesses
- Wyoming Department of Family Services
- Chambers of Commerce
- City councils
- Boards of Cooperative Educational Services (BOCES)
- Local school districts including tech prep and concurrent enrollment efforts
- University of Wyoming
- Tribal TANF offices (Shoshone and Arapaho) Tribal TANF office
- Native American Vocational Tribal Employment Programs (NAVTEP)
- Correctional facilities
- Hospitals
- Area churches
- Professional Standards Teaching Board
- Wyoming State Nursing Board
- Service Organizations such as Rotary, Lions, and Kiwanis
- State Interagency Training Consortium
- College Business Programs Advisory Committees
- Various medical agencies and organizations to provide clinical facilities for training in health occupations programs

Second—Pathways. Successful workforce development *MUST* have upwardly mobile pathways that take students from where they are to where they need to be to lead self-sufficient and productive lives. Getting a job, if a very low-paying one, may be less helpful in the long run than helping our students continue their education to prepare them for higher paying jobs. Wyoming's community colleges pride themselves in providing pathways to success for many first-generation and many "at risk" students, many of whom have, for a variety of reasons, dropped out of school

and failed to finish their high school education. As such, the community colleges provide a continuum of three phases of education—to work with students from where they ARE to where they NEED TO BE. These three phases are as follows:

1. **PRE-COLLEGE (First Pathway)**—The colleges offer adult basic education and English as a Second Language. We also offer education for the General Education High School Equivalency Diploma, called the GED, in cooperation with the Dept. of Workforce Services. For example, 2 years ago, CWC graduated 200 GED graduates, making it the largest high school graduating class in Fremont County. We also work with unskilled and unemployed (or underemployed) adults through such programs as TANF, in partnership with Workforce Services. We teach such skills as the work ethic, basic computer skills, customer services (for example through the Quick Start program, in cooperation with the Wyoming Business Council).

Together, the colleges annually educate over 5,200 students in ABE/GED/ESL offerings.

2. **COLLEGE/UNIVERSITY (Second Pathway)**—The next phase of the continuum relates to both transfer and applied degrees and certificates in a variety of vocational/technical and other areas.

In vocational/technical areas alone, Wyoming's seven community colleges graduate over 1,200 vocational/technical students annually.

This number does not include many transfer degrees, such as nursing or business administration, geared to prepare students for immediate entry into the workplace.

3. **LIFELONG EDUCATION: WORKFORCE TRAINING (Third Pathway)**—This third phase of the continuum emphasizes the necessity for keeping our workforce skills up-to-date and honed for emerging jobs, markets, and businesses.

In workforce lifelong education and workforce training, the 7 colleges offer over 1,000 classes per year, with over 6,600 students and over 6,500 graduates.

TECH-PREP IS A KEY EXAMPLE OF CAREER PATHWAYS THAT WORK

Perkins funding has supported tech prep pathways and assisted in developing working relationships, articulation agreements, and seamless educational pathways between secondary and post-secondary educational institutions. At Sheridan College, dual credit programs are offered for high school students that include vocational exploratory classes and opportunities for career exploration and job shadowing.

The Perkins Act currently contains two key programs that improve connections between community colleges and their local school systems: Tech Prep and the Tech Prep demonstration program. While there is room for improvement, the Tech Prep program has proven valuable in establishing pathways for CTE students to make a smooth transition from high school to college. AACC recommends, and I support maintaining the Tech Prep program, with a modification to require that contracts between consortia partners be renewed every 2 or 3 years, so that details governing the program and expenditure of funds can be reviewed on a regular basis.

The Tech Prep Demonstration program has emerged as a small but important source of support for community colleges seeking to establish or improve middle colleges on their campuses. Middle colleges are generating a tremendous amount of interest as a means of smoothing and encouraging the transition from high school to college, often targeted to students who would otherwise be less likely to make that leap. In each year of funding for the Tech Prep demonstration program, proposals have far outnumbered available grants, demonstrating the level of interest in establishing "middle colleges" at community colleges. This program should also be maintained in the reauthorized Perkins Act.

Third "P" is PLANNING. Each year the colleges plan and host many workforce investment activities. Let me give you a few examples from this past year:

- Northwest College offered professional development for 65 educators, as well as school-to-careers events and competitions for 190 middle and high school youth.

- Northwest College also provides 35 student interns in businesses and agencies.

- LCCC participated in the Workforce Development Expo in Washington, and has offered 3 career fairs, in partnership with the Dept. of Workforce Services.

- CWC, too, offered a career fair on our campus this past year that attracted over 300 participants, with 26 companies interviewing. CWC also hosted a Career Fair with over 500 participants and 46 businesses on display.

- EWC hosts an Annual Technology Day with about 120 participants, and EWC's Ag Department developed and hosted the Beef Symposium with about 40 participants.

This just gives you an idea of the necessity of the planning that improves workforce development on the part of the colleges.

STRENGTHS OF COMMUNITY COLLEGES IN WORKFORCE DEVELOPMENT

The colleges provide many examples of working partnerships to enhance workforce development. Strengths of community colleges in workforce development are as follows:

- Access to talented trainers and instructors.
- Training provided for businesses and agencies of all sizes.
- Training that responds to regional and local needs; builds regional economic development capacity.
- Coordinated flexible, responsive, customer-focused, valuable partnerships.
- Support of the Department of Workforce Services and other local business partners.
- Providing financial assistance to the students and programs (supplies and support).
- Community colleges are uniquely positioned to be the “first choice” provider for meeting workforce development needs due to the community colleges’ “bank” of expertise and knowledge (professionals and faculty) and training facilities and technology. (Where else can you train 25 people at a time on computers?)
- Community colleges are very cost competitive.
- And Wyoming’s community colleges are the best of the best. This year, for example, the National Center for Digital Education named LCCC among the “Top Ten Digital Savvy Community Colleges” in the country for the large/urban category. CWC was named in the Top Ten Digital Savvy Community Colleges in the small/rural category. CWC was also named in the Top 50 Fastest Growing Community Colleges in the U.S.

EXAMPLES OF WORKING WITH SMALL BUSINESSES

A prime example of one of CWC’s partnerships with business through use of Perkins funding is our “internship” program. We place college student interns with Brunton; Wyoming.com; local school districts; McKee, Marburger, & Fagnant (accounting firm); and the National Weather Service to provide practical work experience opportunities to students, particularly in areas in which the technical coursework alone is insufficient to prepare the student for direct entry into the workforce. The locals just love our interns and usually hire these students on a permanent basis, sometimes even before their internship period is completed. The type of work ranges from technical support to engineering functions. Students in CWC’s internship program earn college credits while they gain practical experience on the job.

CWC has also conducted a number of workshops for local businesses and organizations, including the following over the past month:

- Conflict Resolution Training for Nursing Staff (Riverton Memorial Hospital).
- Board Planning Retreat (Child Development Services of Fremont County).

The fourth “P” is PATRONAGE. We have an incredible wealth of expertise and entrepreneurial spirit at the colleges, and the colleges are connected to their communities. We need to invest in those wonderful resources for a greater payoff in workforce development. We need to support community colleges.

More patronage means more resources! Our *challenges* are as follows:

- Obtain more State funding for a growing college role in workforce development and to meet regional need—our State funding for workforce development brings to mind another “P”—pathetic!
- We need greater state-level support for the community colleges as the preferred training provider.
- Development of a funding process that is more sensitive to differences in regional workforce training needs.
- Greater awareness of community colleges as viable employee development resources.
- More readily available resources for marketing, staffing, curriculum development, equipment, and facilitator certification (Wyoming’s community colleges are little known “gems” of our great State).
- Sufficient resources for identifying and serving the myriad of training needs for a technology-driven workforce.
- Additional staffing and resources to track completers and collect reliable follow-up performance information.
- More realistic expectations of students for job placement after program completion.
- More work at the Federal level, including support for “tried and true” programs, such as the Carl Perkins Act.

But we at the community colleges can do a lot more to help ourselves.

- The community colleges have to prove that we are as capable as private training entities in providing high quality/caliber, leading-edge training programs.
- The community colleges have to allow customized training/workforce development departments within the college system the flexibility they need to operate “outside the box” of the traditional educational models, tuition/fees, and schedules.

The fifth “P” is PASSION. We have to continue to believe that every human being has dignity and worth and that all Wyoming citizens deserve an opportunity to lead useful and productive lives. In our zeal to prepare our citizens for high-paying jobs (and to reduce the gender pay gap), I hope we do NOT stick with 220 percent of the Federal poverty level to measure what jobs are worthy of training. That would mean that a family of three would require \$34,000 a year. Folks, I’m embarrassed to say that at Central Wyoming College in Fremont County, \$34,000 is more than our master’s prepared beginning faculty salary make. These highly qualified beginning faculty members start at \$32,000 per year. These kinds of unrealistic salaries are going to leave behind single mothers, who would be delighted to make even \$24,000. Let’s not leave them out.

We have to believe what we say—to make our programs match our rhetoric. We can develop a skilled and productive workforce if we have a shared mission, and, more importantly, if we have the passion to make it come true.

So, in conclusion, we need the five “Ps”:

1. PARTNERSHIPS
2. PATHWAYS
3. PLANNING
4. PATRONAGE
5. PASSION

With these five “Ps,” we can bring about another “P” in terms of PROGRESS toward enhanced career-technical education.

HISTORY OF CARL PERKINS ACT

The Carl Perkins Act has a long history, and it is a highly effective “workhorse” of a Federal program that is extremely accountable. The Perkins Act has had the flexibility to morph from its original vocational education roots into a program for enhancing career and technical education in the secondary schools and at community colleges to prepare today’s students for tomorrow’s jobs. The Carl Perkins had its genesis in the Smith-Hughes Act of 1917, which represented the first Federal legislation that specifically funded vocational education. In 1931 the National Advisory Committee on Education was established and supported legislation to further increase funding, first through the George-Ellzey Act in 1934 and then in the George-Deen Act of 1936. The Vocational Education Act of 1963 again increased vocational funding and permitted States flexibility in the development of programs. Amendments were added in 1968 and 1972, and in 1984, the act was renamed after Carl Perkins. The Perkins Act was reauthorized in 1990 and again in 1997. Although the program is old, it has not lost its relevance to today’s knowledge-based, technologically advanced, and global economy.

LIMITED “SMALL STATE MINIMUM”

We are also very concerned about the limited funding to Wyoming, which is based on the “small State minimum” awarded to six States, including Wyoming, and which has not been increased since 1994. This limited funding does not come close to the 43 percent inflation factor during this time, especially with equipment and technical costs on the rise.

PERKINS FUNDS AT WORK

Wyoming currently receives \$4.2 million in Perkins funds, as the “small State minimum.” The State has not have seen an increase in career technical education (CTE) funding since 1994 and the program has been negatively impacted by the 43 percent inflationary increase over the last decade. Increasing national funding levels or at least maintaining them is just critical.

Perkins funds, even though small, have a significant impact on career technical education (CTE) program operations in Wyoming community colleges and range from 12–50 percent of their total CTE budgets. These funds are used to support various aspects of vocational education including enhancing communication and technological literacy skills; acquisition of technological equipment and specialized software to industry standards; individualized tutoring; internships; at-risk student interventions; direct assistance to members of special populations (single parents, single pregnant women, displaced homemakers, special needs students); and job-embedded faculty development training.

Without Perkins' support, these special services and programs would not exist. Since the estimates are that 80 percent of our population will not need a 4-year degree to be trained for the jobs that will exist in the 21st century, and since we continue to import workers in these CTE areas in response to employers' demands, it makes excellent economic sense to "grow our own." The funding allotted to Perkins is minor compared to the benefits to our national and State economies and the taxes that these self-sufficient students will pay in the future. They also will not be absorbing State and national funding through welfare assistance.

In the past 2 years, Perkins funds have benefited 25–34 percent of all enrolled college students, and have touched almost 65 percent of the total number of graduates from Wyoming colleges. Success of the CTE programs directly affect the number of trained graduates entering the workforce.

PERKINS SUCCESS STORIES

Wyoming's community colleges have many success stories of graduates and currently enrolled students that were realized due to Perkins funding assistance. Following are a few examples.

Example 1: April was divorced in 1992, with one child. She decided to return to school, and applied for all the grants she could get. While a student at Central Wyoming College (CWC), she received Perkins funding for books, transportation, child care, clothing. She also received counseling and support from the Perkins funded staff person that was invaluable in helping her deal with parenting and other personal issues, etc. She persisted in school and graduated from CWC in 1995 as a valuedictorian with an AAS in Data Processing, a Certificate in Accounting and in Microcomputers. She worked for Fremont Counseling for 6 years, Wyoming Services for Independent Living for 2 years, and began working for CWC in April 2004. Without the Perkins assistance, she may have been a continuing burden on taxpayers instead of being the established productive worker she is today.

Example 2: Christie is a single mother with two children who began attending CWC in 2001 and graduated in 2003 with an AA in Surgical Technology. She encountered numerous personal problems while attending CWC but persisted in school due to the additional financial assistance and counseling available through the Perkins program. During the fall semester of her final year, she moved her family to the small town of Pinedale, 180 miles away from the main campus in Riverton, to be close to the clinical site in Jackson. She drove to Riverton for classes on Monday and Tuesday, drove to Jackson for clinicals on Wednesday, Thursday and Friday, then to Pinedale for the weekend to be with her children. During spring semester, her clinical site changed and she moved the family to Rock Springs, 150 miles in a different direction, to do the clinicals there. She is currently gainfully employed at a hospital in Kemmerer, again, thanks to the support of the Perkins program.

Example 3: Christa is currently enrolled at CWC completing her 2-year degree program in Business Management and is scheduled to graduate next semester. She is a 24-year-old single mother with a 7-year-old son under her care. The Perkins Grant has helped her out with that little extra assistance needed throughout the semester and helped her gain employable skills. She is deeply grateful for the opportunity to turn her life around.

Example 4: Michelle is a single parent of three sons who is enrolled in the Dental Assisting program at Sheridan College. With assistance from the Perkins grant, she was able to attend college and develop her employability, communications and thinking skills. Through the tutoring assistance she receives, she has a better understanding of the difficult concepts involved in her technical education program. She can now acquire an education that will enable her to support herself and her sons. Her successes are an encouragement to others who look to her as a role model.

Example 5: A student who attended Eastern Wyoming College (EWC) to major in welding and joining technology was often the only female in her welding skills classes. When asked "What difficulties did you experience in working in a gender unequal field?" she quickly responded that thanks to the support system established by the Perkins programs, she never felt "out of place" or discouraged, and soon considered herself to be "just one of the guys." This young lady worked on breaks and over summers in the coal industry mechanic shops as a welder. She made excellent money and gained invaluable work experience. She went on to graduate from the EWC program and works in the industry. She has a new goal of becoming a welding instructor herself someday.

Example 6: A 41-year-old married carpenter with five teenage children needed to change occupations because of wear and tear on his knees. He needed a training program that would give him the salary to support his family of seven and a major that would require the minimum amount of time to complete and return him to the

workforce. This man chose the nursing profession, spent 2 years completing his pre-requisite courses while he continued to work as a carpenter and was then accepted into the nursing program. He completed the program while working part-time as a licensed practical nurse, and graduated in May 2003 with his RN degree and a GPA over 3.75! He is now working as a registered nurse in a local hospital, and all this was made possible by the Perkins funds that assisted him with his tuition, books and supplies.

Example 7: A young mother with two toddlers registered in the criminal justice program in the fall of 2003. In November, her husband's reserve unit was called to Iraq. Alone now with their children, she has a sharply decreased family income and has no way to pay for her tuition, books, and supplies. The Perkins funds is paying for her college attendance costs and providing extensive support services to alleviate some of the separation stress and anxiety from her husband's absence and his dangerous mission.

Example 8: Jeremy is a special needs vocational student at Western Wyoming College. He received classroom accommodations through Perkins programs for his learning disabilities. The Perkins staff made arrangements to have "hands-on" training in a co-op educational setting that proved to be very valuable. Jeremy is currently employed with the same business on a permanent basis, and is grateful for the assistance he received.

OTHER PERKINS SERVICES AND BENEFITS

Perkins-funded equipment and professional development activities have helped several of our photography students publish their work in national photography magazines, even before they graduated from the college. This exposure and recognition has launched these students into successful careers with major corporations across the United States. Other students chose to use this exposure as the foundation for opening their own businesses. Similarly, journalism students have won national awards for the newspaper and web casts they have produced with the help of Perkins funded equipment. Students have learned and demonstrated professional performance abilities in these competitive fields.

REAUTHORIZATION PROPOSAL

In its 2005 budget request, the administration has proposed a reorganization of the Vocational Education programs as part of the Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III), which expires in fiscal year 2005. Under the new proposal, existing programs would be replaced by a new secondary and technical education program designed to "shift from providing traditional vocational education to a stronger focus on supporting high levels of academic achievement at the high school level in the context of career and technical education programs offered in conjunction with postsecondary education and training partners." While the U.S. Department of Education's goal (number 5) from its 2002-2007 Strategic Plan affirms, "Enhance the quality of and access to postsecondary education," the Reauthorization proposal brings into question if the Department of Education appropriately distinguishes the Federal role between supporting K-12 and postsecondary education. If enacted, the reduced support for the postsecondary level will hurt deserving adult students, and in turn slow down efforts of rebuilding the national economy.

ISSUES WITH THE PROPOSED REAUTHORIZATION

1. Reauthorization process gives us a unique opportunity to define the overarching purpose of the Perkins Act. It should be restated to focus on economic development through improvement in career and technical education (CTE) programs serving high demand occupations.

2. The proposal for reauthorization of the Carl D. Perkins Vocational and Technical Education Act has been renamed the Carl D. Perkins Secondary and Technical Education Excellence Act, indicating in not so subtle terms, an emphasis towards secondary education. With this approach, the Department of Education has introduced the "uses of funds" language for Basic State Grants geared towards secondary education and is practically unrelated to the needs of adult students attending community colleges. The proposal fails to recognize the role of postsecondary institutions in serving members of the society who are beyond high school age.

3. A number of reports show higher earning capacities for workers with postsecondary education. Instead of focusing on secondary education in the reauthorization process, an increased support for the community college programs will help build a broad, more effective career and technical education system that will serve current and future needs of secondary students, traditional college age students,

and adult learners. With increasing global competition, especially in career-technology fields, it is prudent to stress education and skills beyond the secondary level.

Wyoming Department of Education consultants (Jacob et al.) were quoted in a White Paper (March 13, 2003) *Developing a Rationale for Wyoming's Carl Perkins Funding Split* as making the following observations which are very apropos to the present discussion.

a. The nature of jobs in the modern economy requires greater career-technical education than can be offered at the secondary level alone.

b. More jobs require postsecondary credentials (certificates and associate degrees), net of experience and training, therefore the greatest benefit to the workforce is through postsecondary.

c. Vocational Course-taking in the high schools has remained steady and has not grown. The percentage of students taking three or more courses in a single occupational area has declined dramatically.

d. High schools should be places where students master a set of basic competencies necessary for all of adult life, rather than specializing in specific preparation for employment; this idea has been embedded in State high school exit examinations that focus on the basic academic subjects, and now in the exams required in the No Child Left Behind legislation.

4. Students attend community colleges for various reasons including skill attainment; retraining for emerging technologies; career assessment; advancing in current jobs; improving basic skills in English, reading, or math; earning credentials or certificates; transferring to another 2- or 4-year college; or, completing a degree program. The proposed Perkins Act focuses narrowly only on "completion" rates, more appropriate to secondary schools than to the community colleges.

5. Community colleges are uniquely organized to train and retrain students in career technical education fields, with goals parallel to those of the Perkins Act. Taxpayers' dollars will therefore be better spent with the Perkins Act working more closely and in consort with community colleges, rather than appending with secondary education.

6. Secondary programs eligible for Perkins funding should be limited to those providing clear pathways to the acquisition of high-order skills and academic knowledge taught at the postsecondary level.

7. Community colleges routinely partner with a number of external entities including businesses, social agencies, adult education centers, school districts, baccalaureate institutions, etc., to meet the needs of their communities, maximizing investment returns manifold. They are better suited to implement the Perkins initiatives holistically, guiding students to work, training, and/or further education.

8. Perkins funding has also supported Tech Prep pathways and assisted in developing working relationships, articulation agreements, and seamless educational pathways between certain secondary and post-secondary educational institutions. However, overall, coordination between secondary and postsecondary education over Tech Prep programs continues to be problematic. I support the AACC's view that the Tech Prep program should continue to foster education reform as a separate agenda item.

What we need is more patronage—more resources! Our *challenges* are as follows:

- Work for re-authorization of the Carl Perkins Act at an increased (NOT reduced) funding level;

- Increase the "small State minimum" in Perkins funding;

- Encourage high schools to focus on providing the academic basics, as well as career exploration, so that community colleges can focus on applied career and technical education through such mechanisms as dual enrollment;

- Ensure that community colleges serve as the primary partner for Carl Perkins funding in partnership with businesses and secondary schools.

- Require States to provide a defensible rationale for splitting Carl Perkins funding between community colleges and their secondary partners.

- Recognize that community colleges serve a broad base of students, averaging about 29 years of age that includes both traditional high school students and non-traditional older students.

- Do not allow a successful program, such as Perkins, to become mired in politics.

Thank you for the opportunity to testify before you today. Through this reauthorization process, I hope we can make decisions that will have lasting benefits in helping our youth and adults fulfill their career goals and participate with us in the American dream. I will be happy to answer any of your questions.

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Senator ENZI. Thank you.

Our next witness is Harry Lightsey from Columbia, SC. He is the president of BellSouth in South Carolina. Mr. Lightsey began his telecommunications career in 1982 when he joined the Southwestern Bell Legal Department. Four years later, he transferred to BellSouth Corporation. His career at BellSouth has included assignments in Atlanta and Miami as well as South Carolina. On September 1, 2000, he was promoted to State president in South Carolina. Mr. Lightsey is also on the board of the Governor's School for Science and Mathematics Foundation and the Spoleto Music Festival. He serves as a member of the Palmetto Business Forum, the South Carolina Chamber of Commerce Excellence in Education Council, and the BIPEC Distinguished Advisory Council. He is on the board of the ETV Endowment of South Carolina, the University of South Carolina Educational Foundation, the College of Charleston Foundation, and the R.L. Bryan Company.

Mr. Lightsey.

**STATEMENT OF HARRY LIGHTSEY, PRESIDENT, BELL SOUTH,
SOUTH CAROLINA, COLUMBIA, SC**

Mr. LIGHTSEY. Thank you, Mr. Chairman and Members of the Committee.

Four years ago, a diesel systems technology company decided to build a facility to manufacture cutting-edge diesel fuel injectors in the Midlands of South Carolina. They wanted to hire about 500 local employees. But the company could not find enough skilled workers. The first 1,000 applications were a combination of adults and recent high school graduates. The company was only able to hire about 50 of those applicants. Of that, only 35 started work.

I share this story with you to illustrate the fact that in South Carolina, and probably many other places, today's workers do not have the skills for the modern workplace. Our current education system is not producing a labor force with the higher-level skills that technical businesses need to be successful in the competitive global economy.

As a result, South Carolina's economy suffers. Today, South Carolina's per capita income is only 80 percent of the national average. South Carolina's unemployment rate is currently the third highest in the Nation.

To help resolve this problem, a coalition of business leaders are partnering with the South Carolina Department of Education to rebuild our economy around higher-skilled, higher-paying jobs by im-

proving academic and technical skills of high school graduates entering the workforce and entering postsecondary education.

BellSouth recognized the need to help improve the quality of education in the Southeast by establishing a foundation in 1986. Since its inception, the BellSouth Foundation has awarded grants to over 400 institutions totaling about \$46.5 million.

Recently, BellSouth and the BellSouth Foundation gave a \$1 million grant to the South Carolina Department of Education to address the need for more workers with higher skill levels. This grant helps fund two programs: Project Lead the Way and FIRST Robotics.

Project Lead the Way is a national high school curriculum that forms partnerships among public high schools, higher education institutions, and the private sector to increase the quantity and quality of engineers and engineering technologists. In South Carolina, Project Lead the Way is a partnership between BellSouth, the South Carolina Department of Education, and the University of South Carolina School of Engineering. Project Lead the Way offers a 4-year sequence of courses which feature hands-on collaborative learning experiences and, when combined with traditional mathematics and science courses, introduces high school students to the disciplines of engineering and engineering technology. But Project Lead the Way is not just for students interested in engineering. It is also for students interested in developing technical skills needed in our workforce. Currently, 52 schools in South Carolina participate in the program, and we plan to grow that to over 100 by September 2005.

The other exciting program is FIRST, an acronym that stands for "For Inspiration and Recognition of Science and Technology." FIRST is a national program which challenges high school students to work with professional engineering and business mentors to design and build a robot in 6 weeks. Each team must start with the same kit of parts, and then the students and their robots compete in an intense, action-packed, 2-minute competition that measures the effectiveness of each robot, the power of the team strategy, and the collaboration and determination of the students.

FIRST encourages students who may not be predisposed to science, math, or technology to participate, and it is designed to inspire, motivate, and encourage students to learn. Since there are critical roles for students in everything from design and building, to computer animation, every student can actively participate and benefit.

There are literally hundreds of examples how FIRST and Project Lead the Way have inspired students, especially women and minorities, to get involved in engineering and technical programs. These students learn more than technical skills. They also learn skills that are desperately needed in our workforce, like innovation, teamwork, project management, leadership, and ethics.

Earlier this year, South Carolina hosted the inaugural Palmetto FIRST Regional Robotics Competition, where 42 teams of high school students from across the Nation competed. Because of the excitement the FIRST competition generated in schools throughout the State, we have seen a 100-percent increase in the Project Lead the Way program.

We need 21st century learning to encourage students to stay in school and actively learn skills for future jobs. There is so much noise in the world today. Our young people are literally bombarded from different directions—TV, video games, instant messaging. Asking them to sit in a conventional classroom to learn is asking the impossible for many. For real learning, we need to pick up these students and shake them with hands-on learning, where they are challenged with real problems to solve in real time. That is what Project Lead the Way and FIRST does.

Congress needs to encourage more private-public partnerships to help improve education in this Nation and to help prepare our students to be successful in the world economy. For example, high school students could use adjunct faculty from technical schools and businesses to work with students on programs like FIRST. Businesses and the public sector should help improve the academic integrity of vocational and technical education programs at both high school and postsecondary schools to ensure these classes are providing the relevant skills for our 21st century jobs.

Another important factor is Federal funding. Funding of the Carl D. Perkins Vocational and Technical Education program is critical. Our schools need the Federal grant funds for programs that inspire and challenge our young people to develop skills that will allow our businesses to continue to build our economy now and for the future.

Thank you very much.

[The prepared statement of Mr. Lightsey follows:]

PREPARED STATEMENT OF HARRY LIGHTSEY

Mr. Chairman and Members of the Committee, I am pleased to be here today to discuss with you the need to support career and technical education by reauthorizing the funding for the Carl D. Perkins Vocational and Technical program.

Four years ago a diesel systems technology company decided to build a facility to manufacture cutting edge diesel fuel injectors in the Midlands of South Carolina. They wanted to hire about 500 local people. But, the company couldn't find enough skilled workers. The first 1,000 applications were a combination of adults and recent high school graduates. The company hired about 50 of the applicants. Only 35 started work.

I share this story with you to illustrate the fact that today's workers do not have the skills for the modern workplace. Our current education system is not producing a future labor force with the higher level skills that technical businesses need to be successful in the competitive global economy. Plus, only 70 percent of the students who are enrolled in the eighth grade today will graduate from high school.

As a result, technical companies and other businesses suffer, even though desirable job opportunities, salaries and benefits are available. That impacts South Carolina's economy. Today, South Carolina's per capita income is only 80 percent of the national average. South Carolina's unemployment rate is the third highest in the nation.

To help resolve this problem, a coalition of business leaders are partnering with the South Carolina Department of Education to rebuild our economy around higher skilled, higher paying jobs by improving academic and technical skills of high school graduates entering the workforce and post secondary education. One of these companies, BellSouth recognized the need to help improve the quality of education in the Southeast by establishing a foundation in 1986. Strengthening the South's economy and improving the quality of life for all Southerners is dependent upon a highly-skilled workforce. Since its inception, the BellSouth Foundation has awarded 587 grants to 421 institutions totaling \$46,400,000.

Recently, BellSouth and the BellSouth Foundation gave a \$1 million grant to the SC Department of Education to address the need for more workers with higher skill levels to help improve our economy. The grant helps fund two programs: **Project Lead the Way** and **FIRST Robotics**.

Project Lead the Way is a national program that forms partnerships among public high schools, higher education institutions and the private sector to increase the quantity and quality of engineers and engineering technologists. In South Carolina **Project Lead the Way** is a partnership between BellSouth, the South Carolina Department of Education, and the University of South Carolina School of Engineering. **Project Lead the Way** offers a 4-year sequence of courses which, when combined with traditional mathematics and science courses, introduces high school students to the disciplines of engineering and engineering technology. But, **Project Lead the Way** is not just for students interested in engineering, it is also for students interested in developing technical skills needed in our workforce. Currently, 52 schools in South Carolina participate in the program. We plan to grow that number to 100 by September, 2005.

The **Project Lead The Way** graduate is better prepared for engineering programs and more likely to be successful. In the 2002 Southern Regional Education Board NAEP Assessment, South Carolina led all 28 SREB States in Math, Science, and Reading Assessments. The majority of the South Carolina schools ASSESSED have the **Project Lead the Way** curriculum in place.

The other exciting program is **FIRST**, an acronym that stands for "For Inspiration and Recognition of Science and Technology." **FIRST**, a national program, challenges high school students to work with professional engineering and business mentors to design and build a robot in 6 weeks. Each team must use the same kit of parts and a standard set of rules. Then, the students and their robots compete in an intense, action packed, 2-minute competition that measures the effectiveness of each robot, the power of team strategy and the collaboration and determination of students.

FIRST encourages students who may not be predisposed to science, math or technology to participate and it is designed to inspire, motivate and encourage students to learn basic principles while challenging more experienced students. Since there are critical roles for students in everything from design and building, to computer animation, to fundraising and research, every student can actively participate and benefit.

There are literally hundreds of examples how **FIRST** and **Project Lead the Way** have inspired students, especially women and minorities, to get involved in engineering, technical programs, and robotics. These students learn more than technical skills. They also learn skills that are desperately needed in our workforce like innovation, teamwork, project management, leadership and ethics.

Earlier this year, South Carolina hosted the inaugural Palmetto **FIRST** Regional Robotics Competition, where 42 teams of high school students from across the Nation competed. Because of the excitement the **FIRST** competition generated in schools throughout the State, we've seen a 100 percent increase in the expansion of **Project Lead the Way** pre-engineering programs.

We need 21st Century Learning to encourage students to stay in school and actively learn skills for future jobs. There is so much noise in the world today. Our young people are bombarded from different directions, TV, video games, multi-dimensional technologies, instant messaging, etc. Asking them to sit in a conventional classroom to learn is asking the impossible for many. For real learning, we need to pick up these students and shake them with hands on learning. That is what **Project Lead the Way** and **FIRST** does.

Congress needs to encourage more private/public partnerships to help improve education in this Nation and to help prepare our students to be successful in the world economy. For example, high schools could use "adjunct faculty" from technical schools and businesses to work with students on programs like **FIRST**. Businesses and the public sector should help improve the academic integrity of vocational and technical education programs at both the high school and post secondary schools to ensure these classes provide relevant skills training for 21st Century jobs.

Another important factor is Federal funding. Funding of the Carl D. Perkins Vocational and Technical Education program is critical. Our schools need the Federal grant funds for career and technical education to shake up our young people so they can develop the skills to work in future technical careers.

Thank you.

Senator ENZI. Thank you.

Our next witness will be introduced by the Senator from New York, Senator Clinton.

Senator CLINTON. Thank you very much, Mr. Chairman, and thank you for holding this hearing on such an important issue. In addition to the many points already made about public-private

partnerships, community colleges, and the rest, I am very interested in helping to see if we can do a better job in ensuring that girls and women have the knowledge, encouragement, and opportunities to enter nontraditional occupations that often pay well, have benefits, and lead to self-sufficiency. So I am working with groups like Tradeswomen Now and Tomorrow and Women Work and Wider Opportunities for Women to develop a set of proposals that will improve the Perkins Act.

Today we have a witness who can speak to that. Angela Olszewski works in New York. She is a fantastic example of what can be done when someone is given the right set of opportunities. In 1999, Ms. Olszewski graduated from the Blue-Collar Prep Program at Nontraditional Employment for Women, known as NEW, in New York City. This group has helped thousands of unemployed and underemployed women in the New York City area achieve financial self-sufficiency through employment in the skilled blue-collar trades.

By day, Ms. Olszewski is a journeywoman tile setter, a member of the International Union of Bricklayers and Allied Craft Workers. By night, she is a job readiness instructor at NEW's evening training program where she has helped hundreds of women students prepare for employment in the skilled trades. She is a member of Tradeswomen Now and Tomorrow. She has also worked with the New York City public school system in the Construction Skills 2000 program, designed to expose high school students to the building trades. Something we do not really focus on enough is that we are in danger of losing a lot of our skilled craftsmen and -women—mostly craftsmen, but certainly, you know, more and more women—and we do not have a sufficient pipeline for young people to know how to get into these trades.

So I am very proud to introduce a woman who is an example of what it is we are trying to achieve for many other women as well.

So, Mr. Chairman, this is Angela Olszewski.

Senator ENZI. Ms. Olszewski.

STATEMENT OF ANGELA OLSZEWSKI, JOURNEYWOMAN AND INSTRUCTOR, NONTRADITIONAL EMPLOYMENT FOR WOMEN, NEW YORK, NY

Ms. OLSZEWSKI. Good morning, Senator Enzi, Senator Bingaman, and Senator Clinton. Thank you for the invitation to appear before you today to discuss the issue of nontraditional employment and the reauthorization of the Carl D. Perkins Vocational and Technical Education Act. I would also like to take this opportunity to thank Senator Clinton for inviting me to speak today and for her support of Tradeswomen Now and Tomorrow and her leadership on passing a Senate resolution recognizing the need to increase women's participation in the skilled trades.

My name is Angela Olszewski. I am a member of Local Union No. 7, Tile, Marble and Terrazzo of New York and New Jersey. My local belongs to the International Union of Bricklayers and Allied Craftworkers. I am a union tile setter, a tradeswomen advocate and educator, and a 1999 graduate of a Blue-Collar Prep Program with Nontraditional Employment for Women—NEW—in New York City.

I came here today to tell you that the only way that I was able to get into an apprenticeship with Local No. 7 was because of the training, support, and assistance of NEW. I found out about NEW in 1995 from friends who thought I would be a good match for working in the building trades. But at that time you had to be collecting unemployment or be on public assistance in order to be enrolled at NEW. That was not my situation, and so I kept NEW in the back of my mind, and I continued working jobs which paid between \$8 and \$12 an hour. I came to NEW in 1999, after being laid off from a seasonal clerical associates position with the New York City Parks and Recreation Department. When the season was over, I took my lay-off and my soon-to-be unemployment assistance, and I went straight to NEW and enrolled in their Blue-Collar Prep Program.

I was so excited about entering NEW. I knew my life was going to be changed by the opportunity. The program ran full-time for 12 weeks. I learned about current opportunities in the building trades. I gained confidence in my abilities in the shop classes. I practiced entrance exams and interviews. I improved my physical conditioning, and I felt solidly determined to get into an apprenticeship with the tile setters union.

In my case, NEW had to broker a deal with a union contractor and a union official in order to secure an apprenticeship for me. It was known that this contractor had gotten a job in which the project labor agreement required quotas for the number of women and people of color to be employed. I made my application with the local, and through NEW's persistence and persuasion, the union and the contractor decided to give me a chance. I was accepted into the union's 12-week pre-job tile training program facility in Long Island City. I was the only woman in my class, and except for the secretary, I was the only woman at the entire training facility, which also ran pre-job training programs in marble, brick, restoration, and stone crafts.

I was accepted into the tile setter apprenticeship in 2000, and in 2001, while I was still an apprentice, I was appointed to my International Union's Women's Task Force. The mission of the task force is to propose policy suggestions for the better recruitment and retention of women in the union. In 2002, I worked with Tradeswomen Now and Tomorrow at the Building and Construction Trades Conference here in Washington, DC. I have also worked with a program called Construction Skills 2000, which discusses careers in the building trades to high school-aged girls and boys in the New York public school system.

In 2003, I completed my apprenticeship, and for the past 2 years, I have also been employed part-time as a job readiness instructor in NEW's evening training program. In my class, I share my strategies for completing a successful apprenticeship. I have spoken to hundreds of women who have trained for careers in the building trades. The material in my class is prepared straight out of my experience as a tradeswoman. I cover topics such as dealing with isolation, sexual harassment, and how to effectively monitor the progress of your apprenticeship to make sure you are getting access to skills when training on the job.

These high-skill, high-wage jobs are very rewarding. I have worked on the new construction of many high-rise luxury hotels and residences. I have installed marble bathrooms and granite kitchens. I have worked with cement and quarry tile in large restaurant kitchens. I have even installed glass mosaic tiles inside a swimming pool. My financial rewards from this career are incredible to me. I joke to my friends that I now pay in taxes the amount I used to earn for a living. Let me take you through my annual income for the past 4 years as a tile setter: as a first-year apprentice, \$18,000; second-year apprentice, \$32,000; third-year apprentice, \$46,000; journeyworker, \$55,000.

In recognizing how extremely challenging it can be for women to enter these fields, it is with deep gratitude to NEW that I am dedicated to the work I do on construction sites, as an advocate, and as an instructor. NEW has been around for 25 years, but unfortunately the obstacles and conditions which prevent women from entering and successfully completing careers still exist. Graduates of NEW constitute the majority of women hard hats in New York City. Without NEW's services, most of these women would not be in the skilled trades, and neither would I.

Many of the men that I work with have family in the construction business who provide significant assistance to their entry into the trades and allow them to bypass some of the formal requirements. However, few women are able to enter the trades this way. Their path is often much more difficult. I have seen men brought right into this industry, and I have seen women fill out an application only to be told to wait and maybe we will get back to you.

In the summer of 2001, my International Union participated in the Smithsonian Folklife Festival here in DC. I was invited to be part of a living exhibit called The Masters of the Building Trades. We demonstrated our crafts while people stepped forward to ask questions about it. I was so proud to be there because I showed every little girl who passed by one more choice in her life.

Thank you.

Senator ENZI. Very impressive. I always enjoy these hearings. I learn a lot, and I am inspired by everybody that gives testimony. It is a tremendous help to us in gathering the information that we need to make the right kind of decisions in the legislation that we do. We are not supposed to be the experts. We do wind up being the ones that draft it, so we like to bring in the experts so that we can get the information from the people with the hands-on information. And I am very convinced that with this panel we have that.

Dr. Rush, has the career cluster been difficult to implement in the rural communities? And if not, can you recommend the keys to success on that?

Mr. RUSH. Mr. Chairman, Members of the Committee, as you well know, rural communities do have a special place in my heart and challenge in my job. In ways, career clusters are the only way that small rural communities can give students a broad enough spectrum of options.

The problem, though, is that you simply have to condense it. In other words, a small school district is not going to be able to run 16 career clusters. They may run one, as in the case of Idaho City.

They may run two or three, as in the case of many of our school districts.

But I honestly think that clusters, when properly scoped for the school district, can be implemented in any size district and in a lot of ways are actually a better option for the smaller districts because they have to be more of a jack-of-all-trades type of school.

Senator ENZI. Thank you. You also talked about the community working cooperatively on aligning technical assessments. An important piece of that would be to have a common definition of who and what is being assessed. Is the community working on a common definition of what career and technical education is?

Mr. RUSH. Senator Enzi, Members of the Committee, we do have a common definition of a career technical education student in Idaho. Actually, we have several definitions because students come in at different levels. We have one definition that says a student who has participated, and we count the number who actually participate in a career technical education course. We also have a definition of a concentrator, one who participates in a sequence of courses.

In terms of a national definition, I think the question will come down to what is the purpose of our counting. Is it for program improvement, or is to get some kind of a national measure of progress? If it is for program improvement, then I think it is less important that we have a single national definition. If it is for the purpose of trying to count nationally, then that becomes more important.

The problem is that a national definition does not do us any good unless you have a lot of other things that are standardized, for example, the way we measure progress and that sort of thing.

So I think it is important to have a definition. I am not convinced it is important to have necessarily a standard national definition for all implementation of career technical education. But I do think each community, and in this case, State, needs to define that.

Senator ENZI. Thank you.

Dr. Blankenship, you mentioned the difference that titles of the courses made, lending credibility both to students and parents. And I was fascinated that the reluctant readers preferred nonfiction material. Have those recognitions helped facilitate any curriculum changes or improvements in the academic instruction?

Mr. BLANKENSHIP. Absolutely. Senator Enzi, Senator Bingaman, absolutely. What we have done there is we have raised our expectations, and we have had to overcome a cultural phenomenon in our county. I was at a meeting with some community college and university people yesterday, and we were trying to develop a partnership where we could have a seamless pathway that you have already referred to earlier. And the provost from the university indicated that in his research he had found that in our county 11 percent of our residents had college degrees or some type of advanced degree, postsecondary. And he said that is about half of what the national average is.

And so as a result, our biggest challenge is to convince our public, our students, that they can do this kind of work that will allow them the options to go to postsecondary institutions and further their education and also enter into the workforce with higher skills,

higher competencies, as well as overcome the cultural phenomenon with our parents that education has not been that important to them.

And so as a result, the nonfiction, where they are reading the trade journals and they are seeing what is required of their interests, has absolutely helped us.

Senator ENZI. You also mentioned being results oriented and one way of being able to take credit for the progress and the performance of your students. Would you object to a greater focus on local performance indicators in the Perkins reauthorization?

Mr. BLANKENSHIP. No, I would not. I think that might be a way that all schools could get their staffs to be held more locally accountable rather than just having some type of a national standard, because it is very difficult for all of us to rise to one standard at the same rate and at the same level. So if there were some flexibility there for some local standards, I think that would be great.

Senator ENZI. Thank you. My time has expired in the first round, so I will defer to Senator Bingaman, and I will ask some questions later.

Senator BINGAMAN. Thank you very much. Thanks to all the witnesses. I have enjoyed your testimony very much.

Let me ask first, you know, I have always focused a little bit on the advanced placement exams as a sort of gold standard for the quality of the academic training that we are providing in our schools, and particularly through our high schools. And I gather particularly from your testimony, Dr. Blankenship, and others also, that there are similar certification-type exams that perhaps serve somewhat the same purpose or role in these vocational areas, or in these technical areas, I should say.

You give the example of the American Welding Society certification, I believe, Dr. Blankenship, and also the A-Plus and Cisco networking certifications for the people who are pursuing careers and information technologies.

To what extent are there nationally recognized certification exams in these various areas that are well aligned with the technical training that we are providing to these students in high school or in our colleges?

Mr. BLANKENSHIP. The national standards for the industries or trade clusters are out there. What we have done in our particular case, we have had to move to that because one of the sobering factors that allowed our staff to buy into changing their entire course of study, getting rid of what they were very comfortable with in teaching, and moving to what the standard for the Nation is now requiring was a meeting that several of them and myself had with some apprentice program supervisors from the electricians union in our area of the State. And our staff was very upset in our building and property trades programs as to why our kids would finish a program with him as the teacher, go through the curriculum, and then not receive any kind of apprenticeship credit because of that.

Without batting an eye, the apprentice program supervisor looked at him and me and said, "They really do not know what we need them to know." And because of that, there have been national standards established in all technical career pathways absolutely must go to that, because who knows where a child is going to live

when they finish school and they move on? The adult life takes them to many, many places and because what is acceptable in our local area of Ohio for employment may not be acceptable wherever this child is going to end up. So if we go with the national accreditation standards and we teach that, it will not matter.

Senator BINGAMAN. So you think an essential part of having a successful training program is our schools, high schools and colleges, is to align it with these professional, these nationally recognized certification programs so that when you finish it, you can be certified and you can take that certificate anywhere and get employed.

Mr. BLANKENSHIP. I think that is an absolute must.

Senator BINGAMAN. Okay.

Dr. Rush, you referred, I think, to the same point that I tried to make in the comments I made earlier that there are a lot of young people who are not completing high school who can be challenged by this kind of course opportunity. Is there any kind of quantification of that? I mean, do we really know—we know we are beginning to understand how many of our young people are leaving high school without graduating, although that has been a struggle, frankly. Do we have an idea of how many of those might be persuaded to stay in school if these programs are offered to them? Or is that just pure conjecture?

Mr. RUSH. Mr. Chairman and Senator Bingaman, I do think we have some pretty good data that shows that professional-technical education can make a huge difference. In that one chart that I showed, it divided the students up into the very highest-performing students, medium on standardized tests students, and the lower-performing students on standardized tests. And it showed that if a low-performing student has no professional-technical education, 45 percent of them are going to drop out of school. That is a pretty dramatic percentage.

If about half their curriculum is in professional-technical education, you can reduce that dropout for the low-performing students to about 10 percent, which is a fairly dramatic drop for one piece of intervention.

I just read another study last night that Ken Gray quoted that about 40 percent of the curriculum is the ideal level in order to reduce the dropout rates to the maximum extent possible through career technical education. I do think we have some data that shows that career technical education can impact the retention rates, and I think this will become more and more important as we look at the academic skills because it does not do any good to raise academic skills if the kids drop out of school and do not participate in that effort.

Unfortunately, nationwide, and even in Idaho, one of our fastest graduation programs is the GED, and what we are finding in Idaho is that the percentage of kids that are getting GEDs—or the average age is getting younger and younger. And so somehow we have got to motivate those kids to take advantage of the high school experience, or everything we do to increase the rigor in that experience will be wasted effort.

Senator BINGAMAN. Thank you.

Does that mean my time is up, Mr. Chairman? I sort of noticed there is a light on there.

Senator ENZI. Yes.

Senator BINGAMAN. All right. Just checking. Thank you.

Senator ENZI. I would mention that Senator Kennedy is very involved in a Judiciary markup right now, which, as the Ranking Member, is the reason that he is not here. He does regret missing this hearing, but I can assure you from past experience that he will be well informed on all of the things that are brought up here today.

Senator Reed.

Senator REED. Thank you very much, Mr. Chairman. Thank you, panel, for your testimony today.

Dr. Rush, I have heard from my State that the cap on administrative expenses provides too little dollars to cover all the requirements they have to deal with. It has been that way from about 1990, 5 percent, or \$250,000, and with inflation that \$250,000 has been whittled down to roughly about \$142,000 over those 10 years. But there is also another tension, and that is districts feeling that the State is holding back too much money in terms of their administrative accounts.

Can you comment on that from your perspective?

Mr. RUSH. Mr. Chairman, Senator Reed, there is always an interesting tension between administration expenses and program expenses, and the facts are we want as few dollars in administration as we can possibly administer the programs effectively.

You correctly point out that the administration cap has been in place for a long time, and that has been exacerbated by the fact that the Perkins overall appropriation has not kept up with the rate of inflation. In fact, the entire appropriation bill is probably 42 percent less actual purchasing power than it was when it was first implemented. And so that has exacerbated the administration part of it.

What we have found in Idaho has been not a very significant concern over the amount of administration expenses, and the reason is because we have got a number of very small school districts. And the facts are that you have to look at the overall benefit being delivered to the school district. You can give them an extra 10 bucks, but that will not buy anything. You could retain the 10 bucks and combine it with the 10 bucks from all the other districts and then deliver them \$1,500 worth of curriculum, and that is much more valuable to them.

So in a lot of ways, retaining some administration dollars centrally actually provides more benefit to the local school districts than simply sending all the money out there. Obviously, there is a balance. We have to have enough money to run programs. My solution is to increase Perkins by 3 times, and I think we can handle probably all these problems.

Senator REED. That is a Washington solution.

[Laughter.]

Mr. RUSH. Forgive me.

Senator REED. No, that is okay. It is nice to know it is coming from Idaho.

Let me ask a question to the panel, and my sense is that one of the great levers in any education program is the quality of the teachers, which means professional development. I will ask Dr. Rush, Dr. Blankenship, and all the colleagues for your comments on how we can better integrate and enhance professional development in this Perkins reauthorization process.

Mr. RUSH. Senator Enzi, Senator Reed, professional development is an absolute key. I think that we all agree to that.

In Idaho, we have a very close relationship with our teacher education institutions that provide professional development for our teachers. They are actively involved in even program supervision, workshops. We have also implemented a number of activities, as I said in my original testimony, to address the skills needed for integration of academic skills.

In a lot of cases, some of our technical teachers just do not have the academic skills themselves, and so they feel very uncomfortable when they get to that integration part that they do not feel comfortable helping their students.

This last semester we did a semester-long class with CORD, which brought in math teachers and technical teachers, and they went through curriculum development, ways to teach integration skills, joint development activities between the academic and technical teachers to identify how they were going to work together to integrate those skills. And we find that when we give the teachers the skills, the resistance that they have towards integration goes away because they feel comfortable with it.

Professional-technical education in very many ways is a very complex profession. In many ways, it is much more complex to implement than the academic subjects because the academic subjects are pretty well defined and limited. And so professional development becomes absolutely critical, and I think that it is an important part of the legislation.

Senator REED. Thank you, Dr. Rush.

I wonder if anyone else on the panel would comment on that perspective. Dr. McFarland? Dr. Blankenship? Ms. Olszewski?

Ms. MCFARLAND. Yes, Senator Reed. I want to second the comments made by Dr. Rush. I totally agree that professional development is extremely important. Those programs that allow our college faculty a closer alignment with industry and opportunities to upgrade their skills and bring real-life work situations into the classroom are critical.

I also would like to take this opportunity to say that the certifications that have been referred to are actually very important to the colleges as well, and we would hope to capture certifications in new performance indicators at the postsecondary level. Currently we are not able to do that.

Senator REED. Angela.

Ms. OLSZEWSKI. Critical to the professional development of the curriculum in nontraditional is partnering. Where we have been partnered with cooperative unions and contractors, we have increased the number of women by hundreds and hundreds. In New York City, the electricians union, the carpenters union really cooperate with NEW, and we have had many, many placements of

women. So increased partnerships with all of the unions and contractors are really critical in the nontraditional portion of this.

Senator REED. Thank you very much.

Dr. Blankenship.

Mr. BLANKENSHIP. I would just like to add that at our small school, we spend about 45 percent of the Perkins dollars on staff training. Professional development is absolutely critical if we are going to ask these teachers to make the transitions that I referred to earlier in which they are going to upgrade the curriculum and really teach what the industry is requiring. These certifications require a lot of change and a lot of work on their part, and they are willing to do it. But you have to have the resources to facilitate it.

Mr. LIGHTSEY. If I could add as well, just from a business perspective in terms of the dollars invested, what we have recognized is the best dollar that you can invest in education is in professional development. Having a qualified teacher in the classroom is the biggest single factor in determining how many students are going to stay in that classroom, how many students are going to graduate.

Our initiative, our project, is actually a teaching quality initiative. The teachers are brought in and trained on the curriculum, and it is a great area for investment of any dollar.

Senator REED. Thank you very much.

Thank you, Mr. Chairman.

Senator ENZI. We will begin the second round of questioning now, and I will start with Dr. McFarland. You mentioned in your testimony that students frequently do not follow a straight line from high school to college. How has funding from the Perkins Act facilitated the instruction at CWC to meet the needs of these nontraditional students pursuing additional education and training?

Ms. MCFARLAND. Well, thank you very much. I think we need to remember that the many students who unfortunately do drop out of high school generally end up at community colleges, lacking not only a high school diploma, but lacking basic literary skills. The beauty of the community colleges is we offer that whole continuum of basic literary skills, adult basic education, GED assistance, and then we can also help direct those students into the appropriate course work.

There are any number of reasons that students do not take a straight pathway. Often we see students who are divorced, who are injured on the job, who no longer have the physical capability. I mentioned in my written testimony the 41-year-old carpenter heading a family of seven whose knees gave out. And so he came back and entered our nursing program and essentially trained for a different job.

We have any number of new jobs emerging as well. Computer networking technologies, for example, did not even exist a few years ago and now is a much sought after skilled job.

And so we find that many students, for whatever reason, often because they learn that a job with only a high school diploma does not sufficiently raise a family, come back. So we think it is very critical to have some flexibility and certainly to continue to work closely with the secondary schools and partner with them so that we will make pathways very, very clear and students in high school

know what the relevance is of their course work and how it leads to jobs.

Senator ENZI. Thank you. You also described how building partnerships between secondary and postsecondary institutions has helped the rural programs offer more career and technical education and training opportunities in the rural areas. Are there ways that Congress—and I will ask the rest of you if you want to answer it, too. Are there ways that Congress can encourage these partnerships?

Ms. MCFARLAND. I definitely believe strongly in partnerships, and as noted in my written testimony, we have—and as you know, Senator Enzi—many, many small schools. I gave a large list of high school career technical programs that have been reduced or eliminated entirely, primarily because the schools are so small and the costs for career technical education are on the rise; that unless we pool our resources, as Dr. Rush indicated, we simply cannot keep up.

So it is key that the secondary and postsecondary schools work together. We have found internships to be a very healthy partnership. We have also heavily used dual enrollment as a means in part to keep students interested so they do not have that empty high school senior year, so that they are directing their energies toward the rest of their lives in meaningful and productive employment.

So tech prep is another good example, Senator Enzi, of really closely articulating the seamless connection between junior and senior year work in high school and freshman and sophomore year work at the community colleges. And we have found that to be a much better use of resources and much more highly motivating for our students, much more relevant.

Senator ENZI. Thank you.

Anyone else?

Dr. Rush.

Mr. RUSH. Senator, one of the things we have done in Idaho—and I think this is partly because we have the advantage of being little, but we have a single State board of education which is responsible for higher ed, public ed, professional-technical ed, State Historical Society, public television, you know, anything else. But the advantage of having that single board is that you do have the entities at least motivated to collaborate. Our agency also is responsible for funding all our postsecondary technical colleges as well as the added cost funding for the secondary program.

Our tech prep enrollment this last year went up by 55 percent in 1 year, and every one of our school districts is in the Tech Prep Consortium along with every one of our technical colleges. And one of the things that I think—I am very reluctant to ask for more Federal regulations. I honestly think you have to have enough flexibility at the State level to manage the law so that you can put it in with your own—your State has a lot of priorities as well. But one of the things that we have done is at least coordinate the tech prep with the basic grant in terms of the plan. And that has allowed us to reinforce and incorporate those tech prep principles to support program quality in all of our programs. That does not mean all of our programs are tech prep programs. Students still have to sign

up for a sequence of courses. They still have to meet the tech prep criteria. But they are coordinated together. And so I think that is one of the tools that could be exploited some to increase the partnership.

Frankly, I think we also need increased partnerships with business and industry, and it would not—although I am loath to ask for Federal regulations, it would not bother me a bit if Perkins required a business and industry advisory committee for any program receiving Perkins funds. I cannot imagine a good technical program operating without a business and industry group giving it direct advice on a regular basis and to me that might increase that partnership as well, which I think are absolutely critical to the success of our programs.

Senator ENZI. To what do you attribute the 55-percent increase in the tech prep?

Mr. RUSH. Good management.

[Laughter.]

Senator ENZI, part of it has been that we have been laying the groundwork for the infrastructure for some time, and, frankly, I think that the increased attention to academic standards has forced a lot of districts into looking for alternatives for a great group of students that are not responding well to straight academic intervention in the old style of, well, if they did not get it the first time, we are going to give the same thing again and again and again and again until they still do not get it. So I think people are looking for other options, and tech prep is an attractive option for a lot of folks.

We also changed our incentives some in Idaho to get people motivated.

Senator ENZI. Does anybody else want to comment?

Ms. OLSZEWSKI. Senator Enzi, I just would like to thank Senator Clinton again for passing the resolution that recognizes the need to increase women's participation in the skilled trades. And to that extent, I just want to say that, you know, women have flown on missions on the Space Shuttle; they have flown missions over Afghanistan; they certainly can set tile, lay brick, install sheetrock. So your attention simply helps further legitimize these opportunities for women, and I would like to thank you.

Senator ENZI. Do you have any specific policies that you would suggest Congress to consider to help encourage women and girls to seek training in these high-growth, high-wage, nontraditional occupations?

Ms. OLSZEWSKI. Unfortunately, I am not prepared to speak with authority on that subject.

Senator ENZI. Well, if you would visit with some of the other people that are graduates of the program and that you work with and are instructing in the program and could suggest anything along those lines—I did not mean to make it just off the cuff there, but we really are interested in adding to that encouragement. And in the Workforce Investment Act that I mentioned, we have some priority that is given to this wage disparity that we are noticing, and we want to eliminate that as much as possible. And you have hit on one way that it can be done, which is through the nontraditional

occupations. So any way that you can figure out for us to consider to help with the encouragement—

Ms. OLSZEWSKI. We certainly need to reach women at earlier ages in their life. I joked with a colleague of mine that I was going to start nontraditional daycare where a female child, if you brought a dollar, would check her child into daycare and then would continue to play with nontraditional toys for girls. We need to at least expose girls and young women at earlier ages to these opportunities. Most of the women going through NEW are middle, late 20s, and, you know, I wished I had this opportunity when I was 18. I entered the trades when I was 29.

Senator ENZI. Are most of the training programs at NEW short-term training programs? Are there opportunities for the students to earn credit that would lead to a postsecondary degree or certificate?

Ms. OLSZEWSKI. Well, when I trained at NEW, it was a 12-week full-time program. NEW now offers an abbreviated 6-week full-time program as well as an accelerated 6-week part-time evening program. And there is no—there is OSHA certification—I am sorry, NIOSH certification in the day program, confined space training certification, and sort of in-house awards for students. And we certainly make them aware of opportunities to pursue labor studies through the Cornell School of Labor and Industrial Relations. But that is as much certification as we give them.

Mr. LIGHTSEY. Senator, if I could on that subject just echo, I think that in terms of the program course that I am here representing, I am proud to say that we have experienced women participating and minority participating well above the national norm, about 33 percent above the national norm, and achievement of students in these programs is well in excess of the national norms, even in rural areas that overall are not performing well. So these programs clearly work, and I think it is about showing students the relevance of what they are doing, showing them that there is something concrete, attainable at the end of the line, that they are just not in a classroom, the ability to collaborate and work with other students. That gets students excited and interested in learning. These are all types of programs that are needed, I think, today.

Senator ENZI. Is there any special encouragement that you give, particularly for women and minorities, to get into the FIRST program?

Mr. LIGHTSEY. Well, FIRST and Project Lead the Way are collaborative programs, and so they are nontraditional classrooms. They are really outside-the-classroom type experiences. And I do not think there is anything done in particular to encourage women to participate or minorities to participate, but the students gravitate toward these types of programs because they see something in them that is relevant, that they are interested in and get excited about.

Senator ENZI. The concepts that you work with rely on kind of an adjunct faculty. What kind of participation do you expect from this adjunct faculty? I know it helps bring the South Carolina business community into it, but what are the characteristics of the expectations of that adjunct faculty?

Mr. LIGHTSEY. In terms of the Project Lead the Way curriculum, the faculty members are traditional faculty members of their high schools that are just exposed to additional training and are committed to the program.

In terms of FIRST, it is more or less organized as an extra-curricular activity, and that is where you tend to see business mentors involved, not any particular training especially, but you do see—for example, one team that I am familiar with actually starts classes in the evening. Before school starts, their team members are meeting, and there are roughly 70 to 80 people on a team, meeting twice a week during the evening and learning things like electronic circuitry, hydraulics, and they are all being taught to them by business mentors or people that work on that during the day.

Senator ENZI. Thank you.

Dr. McFarland, you mentioned pathways for students to higher-wage jobs. Is there something that the Perkins funds have helped facilitate? And is there something that Congress could do in the reauthorization?

Ms. MCFARLAND. Well, I certainly believe that many of the appropriate pathways have been addressed today. Perkins funds have very greatly assisted our students in attaining higher-wage jobs, and most of those must go through the postsecondary level.

I do think that it would be helpful if funds were set aside within the Perkins reauthorization, particularly for innovative pathways that might be developed at various locations, which could then be duplicated or replicated within the basic State grant.

I do think that it is very important that students have at the secondary level rigorous academic preparation, some career exploration, and understanding of the relevance of their work at the secondary level, and the necessity to go on to postsecondary. I have mentioned other possible pathways, but one very, very helpful one used by us involves internships. It also allows us to utilize the expertise of business and industry and cements those alliances.

And so the internship for many of our students has been a direct pathway to a job, and we have placed students at wyoming.com, which is an Internet service provider at many of the local accounting offices, at local school districts. We have also placed students at the National Weather Service who tell us that, without our computer students, they simply could not run that office. So I think that is very helpful.

I do want to give one caution, though I agree in concept that we should all direct students as much as possible toward high-demand, high-wage jobs. I think that if we limit the training funds for only particular high-wage jobs, we may be leaving out many women, many single women who are heads of their families. I mentioned at our recent conference at Jackson Hole that if 220 percent of the Federal poverty level is used to measure what counts as a high-wage job, that means for a family of three that would require \$34,000 a year. That is more than Central Wyoming College pays its beginning master's-prepared faculty members. And we have a high unemployment in Fremont County. We have many, many single parents with family responsibilities who would be more than happy to start at a lower step, perhaps \$24,000 a year.

Our panelist indicated that she started out at \$15,000, but she had a pathway that led her increasingly forward in an upwardly mobile way. I just think that those pathways are important, but the first step ought not to be so high that we leave out many of the people in our country who need the assistance and who can, with help, lead very productive lives.

Senator ENZI. Thank you. An excellent comment.

Does anyone else have a concluding comment that they want to make?

Dr. Rush.

Mr. RUSH. Senator Enzi, just to support some of the things that Angela was saying earlier. One of the best recruitment tools for women, or anybody, in the professional-technical education are good programs. And, very frankly, part of our recruitment program is—you know, you go down and visit the program, you would not send anybody there, girls or boys. And it seemed like maybe the boys were more tolerant of that, but what we found is that as we improved the quality of programs, recruitment becomes a much easier issue.

The second thing is that I think clusters has a real potential for broadening the appeal for all kinds of folks to participate in career technical education. I just visited with Elaine Martin in Idaho, who is the president and CEO of a major construction company, and she is also president of the Associated General Contractors in Idaho and is very interested in promoting construction trades and particularly women's participation in those. And as I said, we are working on this major cluster project. One of those clusters is going to be the construction trades cluster. And she is very actively involved in working with our agency to create a construction trades cluster that will appeal across the board, will be of high quality, and will draw the attention for a lot of folks.

So in a lot of ways, the best recruitment tool for women and minorities in career technical education is the same tool that we need to develop good quality programs in general, and that is to put the right kind of curriculum together, the right kind of facilities together, the right kind of equipment, the right kind of professional development to create quality programs.

Senator ENZI. Anyone else?

Mr. BLANKENSHIP. Senator, I would just like to add to what Dr. Rush was saying. I think that is very important, and I think in our small setting, we are seeing that. Our applications this year, as I said in my comments, we have about 400 students. We are going to have 100 more of those. And I think that is because of the process we have gone through to upgrade all of our career and academic programs. As we manage to make them better quality programs, the kids talk to each other. And the word got out, and we are receiving more and more applications and showing interest.

But along with that, I think, when the reauthorization of Perkins comes up, the professional development component that has been discussed at length is very critical, and I think that that should be something that should be required. The industry-based certification of secondary programs is extremely critical, but along with that, the third leg of that triangle really has to be an articulation agreement because those kids have to see, What is this increased rigor

going to gain me? Because they are 17- and 18-year-old kids, and so articulation agreements where there is a seamless pathway to a postsecondary institution, whether it be a community college, a 4-year degree college, or a technical school, is a very critical component for us to be able to attract at the Career and Technical Center an element of student population that is never considered career technical ed as an option.

I said yesterday in that meeting that I referred to earlier, really all kids are tech prep kids. The purpose of an education is to get a job, and I do not think that has quite sunk into all elements of our population.

Senator ENZI. Anyone else?

I go out to Wyoming almost every weekend, so I recognize the trip that Dr. McFarland took out here. And if I can get out there early enough on a Friday when we do not have votes, I like to go to schools. And if I happen to be talking to a 9th grade class, one of my favorite things is to ask them what they think they can make in a job right out of high school. And most of them think they will make about \$45,000.

[Laughter.]

With no skills.

I do appreciate *Parade Magazine* putting out that list of occupations and how much people make in those. I think it is semi-annual. Maybe it is just annual. But I make copies of that and I distribute it in the classroom so they have a little better feel for the range of jobs and money that is involved in it.

Of course, there is not any way to adequately convey the differences across the country in cost of living. I get to experience Wyoming's cost of living when I am there and Washington's cost of living when I am here, and I have noted that it is considerably different. I usually can take my family out to dinner in Wyoming for what it costs me for lunch around here.

[Laughter.]

I want to mention that the members that are not here are involved in other committee meetings and that sort of thing, and they may well have additional questions for you, and I hope that you will provide us with the answers on those, too, particularly with a bent toward how we can reauthorize this program. We will try and do it in a bipartisan way and do it as quickly as possible, hoping that Presidential politics or something like that does not get in the way of it. It seems to be kind of the standard around here at the moment, but that would delay it until hopefully the first item next year if it gets delayed.

One of the questions I will be giving you to get a written response on that sometimes gets overlooked around here, over 90 percent of the businesses in the United States are small businesses. The Federal definition is businesses under 500 employees. So that almost moves it up to 99 percent of the businesses in the country. But I am interested in it, since that is the biggest job market and they are the ones who have been absorbing jobs as big companies have their mergers and then their right-sizing or downsizing, whatever you want to call it. I call it laying people off. It is the small businesses that have been picking them up.

So a lot of the opportunities are in small business, and I want to know how we can encourage the participation of more small businesses as partners in this Perkins program.

I thank you all for your testimony today, and it has been outstanding. It is a tremendous help, and this gives us a platform now to launch the drafting, and hopefully it will be bipartisan enough that we can just take it through by unanimous consent, both Houses.

[Laughter.]

Yes, I am an eternal optimist.

Thank you all for your participation. The record will stay open for at least 2 weeks.

[Additional material follows:]

ADDITIONAL MATERIAL

RESPONSE TO QUESTIONS OF SENATOR ENZI FROM NIEL J. TREBBANO

At the June 24, 2004 hearing of the Health, Education, Labor, and Pensions Committee, Senator Enzi of Wyoming asked a question of Harry Lightsey of BellSouth regarding the efforts of Project Lead The Way to recruit and retain female students in its pre-engineering program. Below is the Project Lead The Way strategy currently employed to do so.

INTRODUCTION

Project Lead The Way is a not-for-profit secondary school pre-engineering program found in over 800 schools in 42 States nationwide. Based on a partnership model that engages schools, higher education, business, industry, and government, Project Lead The Way's altruistic and patriotic intent is best summarized by its mission statement: *We will create dynamic partnerships with our nation's schools to prepare an increasing and more diverse group of students to be successful in engineering and engineering technology programs.*

Project Lead The Way will not succeed in its noble mission unless a more "diverse group of students" find success in engineering and related fields. The female student population represents one underrepresented group in the engineering and science field. Project Lead The Way has identified the following objective as part of its comprehensive Strategic Plan: *By 2006, the enrollment of females in PLTW courses will be 10 percentage points higher than the current female national enrollment in engineering and engineering technology programs.*

PROJECT LEAD THE WAY STRATEGY

The organization's solution strategy is multi-dimensional and is focused on the schools and the dynamics of teaching, learning, academic and career advisement, and parent involvement.

TEACHING

- Gender equity teaching strategies will be infused into the training of Master Teachers (2003).
- Gender equity teaching strategies will be embedded in the teacher training activities of the Summer Training Institute (2003).

LEARNING

- Project Lead The Way will develop and apply a gender equitable filter as part of its Curriculum Frameworks, to be used in all curriculum development and revision (2002).
- Project-based and collaborative learning will continue to be integral components of Project Lead The Way instructional plan.
- Project Lead The Way will continue to refine and enhance activities, recognizing their role in the typical successful learning style of female students.
- Gender friendly classroom environments will be researched for their viability and impact. Recommendations on models will be made to teachers and schools.

ACADEMIC AND CAREER ADVISEMENT

- The issues of gender bias and cultural barriers will become an integral part of counselor conferences (2002).
- Marketing materials promoting female participation in engineering will be developed for use by school counselors with female students and their parents (Laine Communications, 2003).

PARENT INVOLVEMENT

- Marketing materials promoting female participation in engineering will be developed for use by school counselors with female students and their parents (Laine Communications, 2003).

QUESTIONS OF SENATOR BINGAMAN

1. In order to ensure that career and technical programs prepare students for the contemporary workforce, we need to establish alliances between schools and local and regional business and industry. In my home State of New Mexico in Gadsden,

we have an innovative program in a rural border area that has been struggling to keep its jobs and its industry alive. We have directly linked the needs of area employers to the high school and postsecondary curriculum. The employers get a customized workforce, and have more incentive to stay and grow their business in the region. The students get preferred hiring status and opportunities to enhance their skills and obtain certificates as they work. What can we do at the Federal level to encourage such alliances?

2. As I mentioned earlier, career and technical education programs are an effective strategy for dealing with the dropout crisis. Fewer than 70 percent of all students who enter 9th grade will graduate in 12th grade, and graduation rates for minorities are significantly lower (around 50 percent). What specific suggestions do you have for increasing the graduation rate?

3. I noted earlier that more than 80 percent of manufacturers report a shortage of qualified job candidates. How can we close this skills gap?

4. There is general agreement that an ongoing program of professional development is an essential component of rigorous, integrated career and technical programs. How can we ensure that teachers have the knowledge and skills needed in these programs?

PREPARED STATEMENT OF THE NATIONAL COALITION FOR WOMEN AND GIRLS IN EDUCATION

The National Coalition for Women and Girls in Education (NCWGE) appreciates the opportunity to submit this testimony on the reauthorization of the Carl D. Perkins Vocational-Technical Education Act.

NCWGE is comprised of approximately 50 organizations dedicated to improving educational opportunities for women and girls. NCWGE's Task Force on Vocational Education and Workforce Training has advocated for more than 30 years for policies and programs to advance the technical skills and career opportunities of women and girls so that they can attain employment that enables them to achieve long-term economic independence.

NCWGE promotes all of the pathways that lead to high wage/high skill jobs for women and girls from diverse racial, ethnic, socioeconomic, age and disability backgrounds, including training for non-traditional jobs, classified by the Department of Labor as jobs in which one gender comprises less than 25 percent of the workforce. Participation and achievement in career and technical education must not be limited by gender segregation, harassment or barriers that prevent girls and women, including single mothers, displaced homemakers and former welfare recipients, from becoming self-sufficient.

Congress first passed the *Carl D. Perkins Vocational Education Act* in 1984. Also known as "Perkins I," this law recognized the importance of addressing the specific needs of female students by establishing a set-aside of funds that would support programs designed to foster gender equity in vocational education programs. In addition, Perkins I continued to fund a full-time employee in each State whose job it was to administer these programs and services, a provision originally established in 1976 through Title II of the Educational Amendments. In 1990, Perkins II was authorized, and these gender equity provisions were expanded. Funding for the gender equity set-asides in fiscal year 1997 totaled approximately \$100 million.

These gender equity programs were enormously successful in saving State and Federal Governments millions of dollars in public assistance funds by moving women into employment. Thousands of girls and women were trained and educated in occupations that enabled them to become economically self-sufficient. States funded critical research to assess the barriers to female students entering and succeeding in career and technical education programs. For more than 2 decades, these programs gave women and girls the opportunity to succeed in non-traditional jobs.

Despite major support for these provisions in local communities across the country, the gender equity set-asides were eliminated from the Perkins law in 1998—due, in part, to a desire to consolidate Federal education and training programs. Although the Workforce Investment Act of 1998 was intended by some legislators to fill the gap that was created by the elimination of the gender equity provisions in Perkins, WIA has fallen far short of this goal. While WIA contains a few provisions that acknowledge the participation of displaced homemakers, single parents and individuals training for non-traditional careers in the workforce development system, the changes in Perkins have left women and girls without the services they need.

In a 2001 report issued by NCWGE, *Invisible Again: The Impact of Changes in Federal Funding on Vocational Programs for Women and Girls*, over 1,500 programs for girls and women were surveyed on the consequences of the elimination of the gender equity set-asides in Perkins. The results of the survey demonstrate that dra-

matic funding changes have had an adverse effect on the ability of programs to effectively serve all students. Of the respondents to the survey:

- Over 50 percent reported that their funding had decreased since Perkins III took effect in 1998, and they predicted additional funding cuts in the future.

- 71 percent reported that their capacity to provide services to their clientele had decreased. Nearly one-third reported “severe” decreases.

- Around one-third reported decreased State and local agency support for programs and services to support single-parent students, displaced homemaker students, or students studying for non-traditional occupations since Perkins III came into effect.

- 65 percent believed that access to training in their communities was insufficient to meet students’ needs.

- 92 percent reported that the State or local Workforce Investment agencies were not providing sufficient financial support, policy direction, or leadership to support programs and services to recruit and train female students for non-traditional occupations.

Other policy changes made to Perkins law in 1998 negatively affected gender equity programs’ ability to serve displaced homemakers, single parents, and women and girls seeking non-traditional training. Under Perkins III, a set-aside of \$60,000 to \$150,000 from State leadership funds is available to support students preparing for non-traditional training and employment. This small pool of funds, amounting to a maximum of just \$7.5 million, was intended to replace the gender equity set-asides under Perkins II. But the funds authorized under Perkins III to support non-traditional training represent a reduction of 95 percent. In a 2002 State survey conducted by the National Alliance for Partnerships in Equity, moreover, just 14 of the 39 States that responded reported that they were spending the maximum \$150,000 on non-traditional training and employment activities. Ten respondents reported using the minimum \$60,000 on these activities.

Perkins III also increases flexibility for States in administering programs for special populations. States can opt to reserve up to 10 percent of the basic State grant, and direct local agencies to give priority to programs for single parents, displaced homemakers, and students preparing for non-traditional training in the use of these funds. However, few States utilize this option to direct services to these populations. With most States failing to provide leadership in this area, the responsibility for serving displaced homemakers, single parents, and students training for non-traditional occupations resides with the local educational agencies. Due to competing pressures at the local level, local agencies are not adequately funding gender equity programs.

Overall, the removal of the Federal mandate to support displaced homemaker, single parent, and non-traditional training programs has led to a shortage of services and programs for women and girls in vocational education. Yet, there are a few States that succeed in directing resources to these vitally important programs.

- California

The California Department of Education, in partnership with the Sacramento County Office of Education, has produced a free, 15-hour online course, Non-traditional Careers 101 for Educators. The course is designed to increase instructor awareness of non-traditional training, student recruitment and assessment, strategies for retaining students once they enroll, and approaches for placing students in non-traditional jobs.

- New Jersey

Family Tools and Technology (FT&T) is a coeducational after-school program intended to help girls in grades 4–7 gain the same technology and pre-engineering experience as boys. Using career role models, and activities to perform with parents. FT&T was rated a promising program by the Department of Education’s Office of Vocational and Adult Education 2000 Gender Equity Expert Panel.

- Wisconsin

The Technology Action Coalition to Kindle Lifelong Equity (TACKLE) Box Project is a comprehensive initiative that provides training and information to increase the number of girls and young women in technology education and is a component of the Wisconsin statewide reform movement in technology education.

Despite the successes of a few States, recent data indicates that there continues to be an urgent need for innovative gender equity programs in every State. A 2002 study by the National Women’s Law Center of high schools nationwide found girls overwhelmingly dominate the vocational education programs for low-wage, low-benefits jobs such as cosmetology (96 percent female), child care (87 percent female), and health care (86 percent female). Male students tend to dominate the training

programs for high-wage, high-benefits jobs such as plumbing and electrician programs (94 percent male), welding and carpentry (93 percent male), and automotive technology (92 percent male).

The need for gender equity programs continues today. To this end, NCWGE makes the following recommendations for reauthorization of Perkins law:

- Programs and services must be available to women and girls that will enable them to achieve high wage/high skill and non-traditional employment that leads to economic self-sufficiency.

- Career guidance and counseling must be provided to all students and delivered in a fair manner that ensures students are receiving information necessary to lead to high skill/high wage and non-traditional careers.

- Professional development and training must be provided to administrators, counselors, and teachers preparing students for their educational and career choices to ensure that sex-bias in career and technical education is eliminated.

- National activities should support research on the outcomes of women and girls in career and technical education.

- Accountability and disaggregated student data collection must be the cornerstone for planning and funding decisions at both the State and local level.

- Federal agencies must coordinate their enforcement and implementation of education and job training laws (while maintaining the integrity of the laws and their individual funding streams) to best meet the needs of women and girls seeking career and technical education.

We urge you to develop legislation consistent with Perkins' historical commitment to women and girls.

Lisa Maatz, Chair, NCWGE, American Association of University Women; Jocelyn Samuels, Vice-Chair, NCWGE, National Women's Law Center; Jill Miller, Chair, Vocational Education and Workforce Training Task Force, Women Work!

PREPARED STATEMENT OF WADE DELK

ABOUT THE NATIONAL ORGANIZATION FOR COMPETENCY ASSURANCE (NOCA)

NOCA, the pre-eminent organization for the field of certification, is the association representing certification agencies, testing companies, consulting firms and individuals involved in professional certification. NOCA was created in 1977 as the National Commission for Health Certifying Agencies (NCHCA) with Federal funding from the Department of Health, Education and Welfare. Its original congressional mandate was to develop standards for quality certification in the allied health fields and to accredit organizations that met those standards. With the growing use of certification in other fields, NCHCA's leaders recognized that what is essential for credible certification of individuals in the healthcare sector is equally essential for other sectors. With this vision, NCHCA evolved into the membership organization National Organization for Competency Assurance and its accrediting body, the National Commission for Certifying Agencies (NCCA). NOCA is a non-profit, 501(c)(3) organization, committed to serving the public interest.

NOCA's membership is composed of more than 350 organizations responsible for certifying specific skill sets and knowledge bases of professions and occupations at the national and international level. Through certification, NOCA members represent more than 6 million individuals around the world and include accredited programs from some 150 professions and occupations, including 57 healthcare professions. NOCA members certify individual skills in fields as diverse as construction, healthcare, automotive, and finance. A current roster of NOCA members is attached.

NOCA also brings the expertise of its internationally recognized accrediting arm, the National Commission for Certifying Agencies (NCCA). NCCA uses a peer review process to evaluate adherence to its standards by certification programs and grants accreditation to those programs that have met those standards. These standards exceed the requirements set forth by the American Psychological Association and the U.S. Equal Employment Opportunity Commission and serve to protect the health, safety, and welfare of the public by assuring that accredited organizations have met the highest standards for certifying organization established by the field of certification. NCCA is the national accreditation body that provides this service for certification organizations in all disciplines.

NOCA's mission is to promote excellence in competency assurance for individuals in all occupations and professions. No other organization has the presence in or commits the resources to the field of certification. NOCA is proud of its position as the international leader in competency assurance for certification programs, as well

as its role in promoting excellence in competency assurance for practitioners in all occupations and professions.

WHAT IS CERTIFICATION?

The certification of professional and occupational skill-sets affirms a knowledge and experience base for practitioners in a particular field, their employers, and the public at large. Certification represents a declaration of a particular individual's professional competence. In some professions certification is a requirement for employment or practice. Doctors, mechanics, accountants, surveyors and many others establish their credentials and capabilities through certification. In all instances, certification enhances the employability and career advancement of the individual practitioner or employee.

Organizations in today's competitive and challenging economy recognize their workforce as their most valuable asset. Likewise, individuals, whether employed or self-employed, know that now more than ever before they must acquire and maintain more comprehensive skill-sets to ensure their own attractiveness, productivity, and ability in the workplace.

The benefits of certification include:

- Higher wages for employees in the form of higher salaries and pay scales, bonuses, or education assistance;
- A more productive and highly trained workforce for employers;
- Prestige for the individual and a competitive advantage over non-certified individuals in the same field;
- Enhanced employment opportunities;
- Assisting employers in making more informed hiring decisions;
- Assisting consumers in making informed decisions about qualified providers;
- Protecting the general public from incompetent and unfit practitioners; and
- Establishing professional standards for individuals in a particular field.

Equal to the benefits of certification is the importance of establishing an underlying certification program based on best practices and recognized processes and procedures developed by the field of certification. NOCA serves as the member-based organization for the field of certification to enhance professional excellence and ensure the competency of certification programs.

NOCA'S RECOMMENDATIONS FOR ENHANCING VOCATIONAL-TECHNICAL OPPORTUNITIES FOR YOUNG PEOPLE

Among the resources that will enable young people to move into rewarding career opportunities would be access to certification programs whose prerequisites and requirements are within reach of high school graduates and students in vocational and technical training programs. For these young persons, entering the workforce for the first time or retooling their skill-sets for new opportunities, securing certification of an occupational skill can represent an efficient and meaningful pathway to employability.

Occupational certification does not always require a college degree. College can be an expensive and time-consuming undertaking which may not represent a viable or desirable alternative for all young people. Some occupations, such as auto mechanics or X-ray technicians, only require a certification, not a college degree. A certification in fields such as these can open up a rewarding career path with excellent pay and opportunities for advancement for many individuals. Examples of occupations not requiring a baccalaureate degree include:

- *ASE-certified automotive technician.* According to the National Automotive Technicians Education Foundation, automotive technicians receiving the ASE certification can earn \$60,000 or more per year. Positions such as automobile technician, autobody technician, truck technician, and parts specialist are in high demand across the nation.

- *NCCCO-certified crane operator.* The National Commission for the Certification of Crane Operators (CCO) certifies crane operators in industries such as construction, utilities, energy, steel erection, crane rental, petrochemical, and pulp/paper. Highly trained employees represent reduced risks of loss, fewer accidents, and more consistent training for employers. According to the Bureau for Labor Statistics, the mean annual wage for crane operators for 2003 was \$38,950.

- *AAMT certified medical transcriptionist.* According to the American Association of Medical Transcription, the volume of dictation requiring transcription continues to grow; however, the availability of qualified medical transcriptionists has not grown at the same rate. This is an excellent career, offering a competitive annual salary. A May 2002 survey conducted by AAMT reported an average annual salary of \$31,400 for persons holding the AAMT certification.

•*NCLE certified contact lens examiner.* The American Board of Opticianry/National Contact Lens examiners reports in a recent survey of employers that holders of their ABO and NCLE certification, that 75 percent of employers gave preference to hiring certified applicants, 75 percent paid higher salaries to certified personnel, and 40 percent gave preference to employees with ABO and NCLE certification. The report indicates that certified employees earned over \$6,000 more annually than non-certified employees.

These are just a small sampling of the occupations available to young workers, new workforce entrants, and others seeking employment and living wages, who may choose not to go on to pursue a 4 year degree. NOCA and its member organizations have actively sought to enhance these opportunities with the various partnerships underway with community colleges and technical schools across the nation. NOCA member organization certifications may be obtained at these locations.

NOCA recommends including information about certification and licensure as a core service available to young people as a part of the career counseling services they receive in their high school years and throughout the vocational and technical college system.

CONCLUSION

Improving the career opportunities for young people represents the core of the Carl D. Perkins Vocational and Technical Education Act. Many employers in today's competitive and challenging economy have recognized that their workforce is their most valuable asset. Likewise, young people know that now more than ever before they must acquire and maintain more comprehensive skill-sets to ensure their own marketability and competence in the workplace. Certification represents an excellent pathway to employment opportunities for workers in all areas in the economy. It also serves as an important assurance for employers and the general public that individuals have attained the necessary skill-sets to provide the services or carry out the scope of their employment.

NOCA urges the Subcommittee to recognize the important role that certification plays in the vocational-technical education system to move their students into the workplace and jobs that provide stability, career opportunities, and attractive wages.

Respectfully Submitted,

WADE DELK,
Executive Director,
National Organization for
Competency Assurance (NOCA)

APPENDIX—NOCA ORGANIZATIONAL MEMBERS

NOCA's Organizational Members consist of associations, certifying organizations, customer groups, and government agencies that are interested in credentialing.

- AACE International
- ACNM Certification Council, Inc.
- Academy of Ambulatory Foot Surgery
- Academy of Cognitive Therapy
- Academy for Certification of Vision Rehabilitation and Education Professionals
- Accrediting Bureau of Health Education Schools
- Aerobics and Fitness Association of America
- American Academy for the Certification of Brain Injury Specialists
- American Academy of Audiology
- American Academy of Health Care Providers in the Addictive Disorders
- American Academy of Nurse Practitioners
- American Academy of Micropigmentation
- American Academy of Pain Management
- American Academy of Wound Management
- American Association for Medical Transcription
- American Association for Respiratory Care
- American Association of Clinical Coders and Auditors
- American Association of Critical-Care Nurses Certification Corporation
- American Association of Medical Assistants
- American Association of Physician Specialists
- American Board for Certification in Orthotics and Prosthetics, Inc.
- American Board for Certification of Teacher Excellence, Inc.
- American Board for Occupational Health Nurses
- American Board of Ambulatory Medicine
- American Board of Cardiovascular Perfusion

- American Board of Chiropractic Orthopaedists
- American Board of Chiropractic Sports Physicians
- American Board of Forensic Professionals
- American Health Information Management Association
- American Board of Industrial Hygiene
- American Board of Multiple Specialties in Podiatry
- American Board of Nursing Specialties
- American Board of Opticianry
- American Board of Pain Medicine
- American Board of Professional Neuropsychology
- American Board of Registration of Electroencephalographic and Evoked Potential Technologists, Inc.
- American Board of Surgical Assistants
- American Board of Transplant Coordinators
- American Board of Veterinary Practitioners
- American Certification Agency for Healthcare Professionals
- American Chiropractic Board of Radiology
- American Chiropractic Neurology Board
- American Chiropractic Registry of Radiologic Technologists
- American College of Healthcare Executives
- American College of Sports Medicine
- American Compensation Association
- American Construction Inspectors Association
- American Council of Certified Podiatric Physicians and Surgeons
- American Council on Exercise
- American Fence Association, Inc.
- American Fitness Professionals and Associates
- American Hospital Association Certification Center
- American Institute of Certified Public Accountants
- American Hospital Association
- American Medical Massage Association
- American Medical Technologists
- American Nurses Credentialing Center Commission on Certification
- American Occupational Therapy Association
- American Optometric Association on Paraoptometric Certification
- American Payroll Association
- American Petroleum Institute
- American Physical Therapy Association
- American Podiatric Medical Specialties Board
- American Production and Inventory Control Society
- American Reflexology Certification Board
- American Registry of Diagnostic Medical Sonographers
- American Registry of Magnetic Resonance Imaging Technologists
- American Registry of Radiologic Technologists
- American Safety and Health Institute
- American School Food Service Association
- American Society for Horticulture Science
- American Society for Industrial Security
- American Society of Anesthesia Technologists and Technicians
- American Society of Association Executives
- American Society of Military Comptrollers
- American Speech-Language-Hearing Association
- American Veterinary Chiropractic Association, Inc.
- Aquatic Exercise Association, Inc.
- Art Therapy Credentials Board
- Association for Death Education and Counseling
- Association for Investment Management and Research
- Association of Government Accountants
- Association of Medical Illustrators
- Association of Regulatory Boards of Optometry
- Association of Surgical Technologists, Inc.
- Association of Water Technologies, Inc.
- BICSI: A Telecommunications Association
- Behavior Analyst Certification Board
- Biofeedback Certification Institute of America
- Board for Certification in Podorthotics
- Board for Orthotist/Prosthetist Certification
- Board of Certification for Emergency Nursing

- Board of Canadian Registered Safety Professionals
- Board of Certification in Professional Ergonomics
- Board of Certified Safety Professionals
- Board of Environmental, Health & Safety Auditor Certifications
- Board of Pharmaceutical Specialties
- Board of Registered Polysomnographic Technologists
- Brain Injury Association of American
- California-Nevada Section, American Water Works Association
- California Water Environment Association
- Canadian Alliance of Physiotherapy Regulators
- Canadian Board for Respiratory Care, Inc.
- Canadian Chiropractic Examining Board
- Canadian Council of Professional Engineers
- Canadian Securities Institute
- Center for Credentialing and Education
- Certification Board for Music Therapists
- Certification Board for Sterile Processing and Distribution
- Certification Board of Infection Control and Epidemiology
- Certification Board Perioperative Nursing
- Certification of Disability Management Specialists Commission
- Certified Financial Planner Board of Standards, Inc.
- Certified Fund Raising Executive International
- Certified General Accountants' Association of Canada
- Certifying Board for Dietary Managers
- Certifying Board of Gastroenterology Nurses and Associates
- Clinical Nutrition Certification Board
- College of Massage Therapists of Ontario
- College of Medical Radiation Technologists of Ontario
- College of Occupational Therapists of Ontario
- College of Pharmacists of BC
- College of Physiotherapists of Ontario
- College of Respiratory Therapists of Ontario
- Commercial Real Estate Education Foundation, Inc.
- Commission for Case Manager Certification
- Commission for Certification in Geriatric Pharmacy
- Commission on Dietetic Registration of the American Dietetic Association
- Commission on Graduates of Foreign Nursing Schools
- Commission on Rehabilitation Counselor Certification
- Composites Fabricators Association
- Computing Technology Industry Association
- Construction Management Association of America
- Convention Liaison Council
- The Cooper Institute
- Council on Certification of Nurse Anesthetists
- Council on Licensure, Enforcement and Regulation
- Council on Nutrition
- Council on Professional Standards for Kinesiotherapy
- Defense Activity for Non-Traditional Education Support
- Dental Assisting National Board
- The Educational Foundation of the National Restaurant Association
- Examination Board of Professional Home Inspectors
- Federal Law Enforcement Training Accreditation
- Financial Planning Association of Australia
- Fitness Resource Associates
- Fundação Luis Eduardo Magalhães
- Global Recognition Agency
- Golf Course Superintendents Association of America
- Hand Therapy Certification Commission, Inc.
- The Healing Oasis Wellness Center
- Healthcare Information and Management Systems Society
- Healthcare Quality Certification Board
- Human Resource Certification Institute
- IEEE Computer Society
- ISA, the international society for measurement and control
- Illinois Department of Professional Regulation
- Indigo School of Massage
- Infusion Nurses Certification Corporation
- Institute for Safety and Health Management

- Institute of Certified Management Accountants
- Institute of Certified Professional Managers
- Institute of Hazardous Materials Management
- Institute for Supply Management
- Institute of Real Estate Management
- International Air Filtration Certifiers Association
- International Association for Colon Hydrotherapy
- International Association of Eating Disorders Professionals Association
- International Association of Healthcare Central Service Materiel Management
- International Board of Lactation Consultant Examiners
- International Certification and Reciprocity Consortium/Alcohol & Other Drug Abuse, Inc.
- International Certification Institute, LLC
- International Council of E-Commerce Consultants
- InterNational Electrical Testing Association (NETA)
- International Executive Housekeepers Association, Inc.
- International Fitness Professionals Association
- International Accounts Payable Professionals, Inc.
- International Pilates Certification
- International Society for Clinical Densitometry
- International Society of Arboriculture
- International Society of Mine Safety Professionals
- International Society for Performance Improvement
- Joint Commission on Allied Health Personnel in Ophthalmology
- Labor Market Information (LMI) Training Institute
- Lamaze International
- Liaison Council on Certification for the Surgical Technologist
- Linux Professional Institute
- Michigan Institute for Health Enhancement
- National Academy of Sports Medicine
- National Aerobics & Fitness Trainers Association
- National Alliance Wound Care
- National Allied Health Credentialing Center
- National Association Medical Staff Services
- National Association for Health Professionals
- National Association for Subacute or Post Acute Care
- National Association for Interpretation
- National Association of Alcoholism and Drug Abuse Counselors
- National Association of Boards of Pharmacy
- National Association of College Stores
- National Association of Federal Credit Unions
- National Association of Forensic Counselors, Inc.
- National Association of Institutional Linen Management
- National Association of Legal Assistants
- National Association of Mortgage Brokers
- National Association of Social Workers
- National Asthma Educator Certification Board, Inc.
- National Athletic Trainer's Association Board of Certification
- National Blindness Professional Certification Board
- National Board for Certification in Hearing Instrument Sciences
- National Board for Certification of Hospice and Palliative Nurses
- National Board for Certification of Orthopaedic Technologists
- National Board for Certification in Occupational Therapy
- National Board for Certified Counselors
- National Board for Professional Teaching Standards
- National Board for Respiratory Care
- National Board of Certification for Community Association Managers, Inc.
- National Board of Examiners in Optometry
- National Board of Nutrition Support
- National Board of Orthodontics, U.S.
- National Business Aviation Association
- National Center for Competency Testing
- National Certification Board for Diabetes Educators
- National Certification Board for Therapeutic Massage and Body Work
- The National Certification Board of Pediatric Nurse Practitioners and Nurses
- National Certification Commission for Acupuncture and Oriental Medicine
- National Certification Corporation for the Obstetric, Gynecologic, and Neonatal Nursing Specialties

- The National Commission for Health Education Credentialing
- National Commission for the Certification of Crane Operators
- National Community Pharmacists Association
- National Contact Lens Examiners
- National Council for Interior Design Qualification
- National Council for Therapeutic Recreation Certification, Inc.
- National Council of Architectural Registration Boards
- National Council of Building Designer Certification
- National Council of Examiners for Engineering and Surveying
- National Council of State Boards of Nursing, Inc.
- National Council for Therapeutic Recreation Certification
- National Council on Qualifications for the Lighting Professions
- National Dance-Exercise Instructors Training Association
- National Dental Hygiene Certification Board
- National Examining Board of Ocularists
- National Federation of Professional Trainers
- National Glass Association
- National Ground Water Association
- National Healthcareer Association
- National Indian Child Welfare Association
- National Institute for Automotive Service Excellence
- National Institute for Standards in Pharmacist Credentialing
- National Institutes of Health Science & Career Development
- National Kitchen and Bath Association
- National Paramedical Technicians and Assistants Association, Inc.
- National Phlebotomy Association, Inc.
- National Recreation and Park Association
- National Registry of Emergency Medical Technicians
- National Registry of Food Safety Professionals
- National Strength and Conditioning Association (NSCA) Certification Commission
- Nephrology Nursing Certification Commission
- North American Board of Certified Energy Practitioners
- North American Electric Reliability Council
- North American Registry of Midwives
- North American Technician Excellence
- North Carolina Substance Abuse Professional Certification Board
- The Nuclear Medicine Technology Certification Board
- Oncology Nursing Certification Corporation
- Ontario College of Pharmacists
- Ontario College of Social Workers Social Service Workers
- Ophthalmic Photographers' Society, Inc. Board of Certification
- Pharmacy Technician Certification Board
- Product Development & Management Association
- Professional Golfers' Association of America
- Professional Photographers of America
- Project Management Institute
- Radiology Coding Certification Board
- Registry of Interpreters for the Deaf, Inc.
- Rehabilitation Engineering and Assistive Technology Society of North America
- Roof Consultants Institute
- Royal College of Physicians and Surgeons of Canada
- Society of Actuaries
- Society of American Foresters
- Society of Cable Telecommunications Engineers
- Society of Certified Senior Advisors
- Society of Permanent Cosmetic Professionals
- The Society of the Plastics Industry, Inc.
- Society of Tribologists and Lubrication Engineers
- Transportation Professional Certification Board, Inc.
- University of Kentucky Continuing Education
- Veterinary Hospital Managers Association
- Wound, Ostomy, and Continence Nurses Certification Board

[Whereupon, at 11:40 a.m., the hearing was adjourned.]